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**Biological
Assessment
Letter Report**

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BIOLOGICAL ASSESSMENT LETTER REPORT
FOR THE
3111 MANCHESTER AVENUE
CITY OF ENCINITAS

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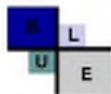


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1.0 SUMMARY OF FINDINGS

This Biological Assessment (BA) letter report documents the results of the biological surveys completed within and surrounding the boundaries of the subject property in support of the proposed development.

The proposed project consists of re-developing the approximately 19.03-acre property, a dominant portion of which is currently utilized as agricultural fields. The project is located on the 7.5-minute USGS Encinitas, California topographic quadrangle, in Section 33, Township 12 South, Range 4 West. The project includes Assessor's Parcel Numbers (APNs) 261-210-01-00 & 261-210-12-00. The south-east corner of the Property has been assumed by Caltrans for the development of the Manchester Park-N-Ride parking lot (a separate project). The property is situated on the southern edge of the city of Encinitas, east of Interstate 5, north of Manchester Avenue (a small portion of the site is south of Manchester Avenue), adjacent to San Elijo Lagoon, which lies along the southern boundary of the project.

A general habitat, sensitive and rare species biological survey, and a protocol wetland delineation was conducted over the approximately 19.03-acre property, and approximately 100' foot perimeter around the Property, on October 21, 2017. The Property was surveyed on foot and resources mapped using a 2017 aerial photograph of the area. Subsequent to the initial survey, additional site surveys were completed, including protocol gnatcatcher surveys and an offsite (south side of Manchester) protocol wetland delineation by RECON (report attached). All discussions relating to potential take and mitigation is based on the premise that the property will be developed under the City of Encinitas's biological regulations, the Multiple Habitat Conservation Program (MHCP), and CEQA.

Animal species observed directly or detected from calls, tracks, scat, nests, or other sign were noted. All plant species observed on-site were also noted, and plants that could not be identified in the field were identified later using taxonomic keys. The site visit included a directed survey for sensitive plants that would be apparent at the time of the survey. Additionally, surveys were performed during the day and nocturnal animals were not observed.

Limitations to the compilation of a comprehensive floral and faunal checklist were few and only limited to the natural constraints of the season; fall. Since surveys were performed during the day, nocturnal animals were detected by sign. Due to the historic grading of the area as well as the ongoing use and maintenance it was determined that the existing site conditions precluded the recommendation of additional surveys being recommended as a comprehensive checklist was prepared.

Floral nomenclature for common plants follows Hickman (1993). Plant community classifications follow the California Natural Diversity Data Base (CNDDB) and Holland (1986). Zoological nomenclature for birds is in accordance with the American Ornithologists' Union Checklist (1998); for mammals, Jones et al. (1982); and for amphibians and reptiles, Collins (1997). Assessments of the sensitivity of species and habitats are based primarily on CEQA, draft City of Encinitas Subarea Plan (2001), State of California (CDFW, 2014), and U.S. Fish and Wildlife Service (USFWS, 2014).

2.0 INTRODUCTION

The approximately 19.03-acre subject property is located in the City of Encinitas, east of Interstate 5 (I-5) and north of Manchester Avenue. (Figures 1-2).

Land Use, Topography, Soils,

The subject property is situated adjacent to the northern boundary of San Elijo Lagoon. The project is disturbed and has been intensely cultivated for several decades. To the south of the Property is the San Elijo Lagoon Open Space, to the west is developed land and Interstate 5, to the east is Mira Costa College and to the north are coastal bluffs, atop which supports high density housing. Onsite, the property has been impacted by nursery operations for several decades.

The property lies in Township 12 South, Range 4 West, San Bernardino Meridian, as depicted on the USGS *Encinitas* 7.5' topographic quadrangle. Physically, the general project area is characterized by a gently sloping flat area. The project elevations range from 40 to 90 feet above mean sea level. The area surrounding the project is characterized by three significant landform elements. The first is the lagoon, which in the period of prehistoric occupation (*i.e.*, between 10,000 and 1,000 years ago) was similar to the other coastal lagoons along the San Diego County coastline. The lagoon at San Elijo was created as the sea level rose rapidly after a long period of lower sea levels. This canyon was flooded and the lagoon habitat that developed supported a large population identified as the La Jolla Complex. The second major landform component is the mesa bluff above (to the north) the Property and the third is the intermediate area between the two, where this Property is located.

Soils onsite are comprised of Corralitos loamy sand with 5 to 9 percent slopes.

Regional Setting

The proposed project is located in the City of Encinitas draft Subarea Plan area and within a 'softline' focused planning area (FPA). If adopted, this Plan would implement policies to conserve natural biotic communities and sensitive plant and wildlife species throughout the City under the MHCP framework. The Subarea Plan would provide regulatory certainty to the landowners within the City and aid in conserving the region's biodiversity and enhancing the quality of life.

Subarea Plans address the potential impacts to natural habitats and rare, threatened or endangered species caused by projects within Cities having such plans. Subarea Plans also form the basis for Implementing Agreements, which are the legally binding agreements between a City and the Wildlife Agencies to ensure implementation of the plan and provides Cities with state and federal "Take authority."

Participating cities prepared focused planning areas (FPA), which show expected levels of conservation that could be achieved by applying available regulatory mechanisms to conserve biologically valuable areas (primarily but not exclusively within the BCLA). Creation of the FPAs thus considered not only the biological value of lands, but also economic, legal, and other constraints to preserving these lands. The FPAs are represented by a combination of "hardline" preserves, indicating lands that will be conserved and managed for biological resources, and "softline" planning areas. The FPAs are represented by a combination of "hardline" preserves, indicating lands that will be conserved and managed for biological resources, and "softline" planning areas, within which preserve areas will ultimately be delineated based on further data and planning.

For softlined areas, which do not have development approvals, development and conservation standards and criteria will be applied to achieve the projected conservation. Conservation targets in upland areas within these softlined areas will vary based on the mitigation ratio to be applied to each vegetation community type (see Section 4.3.1.5). For example, if a 2:1 (conservation:take) ratio applies to a vegetation community type, conservation of that community is calculated at 67 percent of its total mapped acreage on the property (i.e., 2 out of every 3 acres will be conserved). This approach requires that onsite and offsite mitigation is balanced among all the ratio areas within the city (i.e., mitigation is generally required to be within the Encinitas Subarea; see Section 4.3.1.5). Conservation of wetland communities will be at 100 percent in softlined areas, and narrow endemics will be conserved at 95 percent in these areas. Natural habitat lands outside the preserve that will be protected pursuant to city General Plan policies and federal wetland permitting requirements are categorized as “Constrained Lands” and are defined below.

3.0 SURVEY METHODOLOGY

BLUE senior qualified biologist, Michael Jefferson, conducted the surveys on October 21, 2017 (Table 1). The site was surveyed on foot and habitat mapped on a current Google Earth aerial (2017; Figure 4).

Mapping was performed following the Guidelines for Determining Significance and Survey, Report Format, Content and Mapping Requirements (City, MHCP). Wildlife species were identified directly by sight or by vocalizations, and indirectly by scat, tracks, or burrows. Field notes were maintained throughout the surveys and species of interest were mapped. The primary focus of the survey was to document and map the size, location, and general quality of all habitat types and the presence or potential presence of any sensitive resources onsite.

TABLE 1
Survey Details

Date	Survey Type	Time	Conditions Temp (°F), Wind (mph) begin and end, Cloud Cover (CC)	Biologists
10-21-2017	General, Rare, Sensitive, pWD	0800-1030	68°, 0 mph, 5%cc 71°, 1-2 mph, 5%cc	MJ
5/17/19	USFWS protocol CAGN survey #1	1110-1140	68°, 2-4 mph, 15%cc 68°, 2-4 mph, 15%cc	AH
5/27/19	USFWS protocol CAGN survey #2	0945-1050	61°, 1-3 mph, 30%cc 62°, 1-3 mph, 10%cc	AH
6/9/19	USFWS protocol CAGN survey #3	0835-0910	64°, 0-1 mph, 100%cc 64°, 0-1 mph, 100%cc	AH

MJ – Michael Jefferson
ACH – Anita Hill

Vegetation communities were assessed and mapped on a color aerial with topography flown in March 2017 (Google earth). Animal species observed directly or detected from calls, tracks, scat, nests, or other sign were noted. All plant species observed on-site were also noted, and plants that could not be identified in the field were identified later using taxonomic keys.

Limitations to the compilation of a comprehensive faunal and floral checklist were few within the survey area – most of which had been previously, legally, graded, cleared (Ag/support structures), and developed. The general quality of graded land and urbanized habitat within the survey area is, as expected, of low quality. The areas of natural habitat to the north of the agricultural fields is comprised of high quality coastal sage scrub.

Prior to conducting the biological survey, a thorough review of relevant maps, databases, and literature pertaining to biological resources was performed. Recent aerial imagery (Google Earth 2017), topographic maps (USGS 2015), soils maps (USDA 2012), and other maps of the project site and immediate vicinity were acquired and reviewed to obtain updated information on the natural environmental setting. In addition, a query of sensitive species and habitat databases was conducted, including the California Natural Diversity Database (CNDDDB; CDFG 2012a), the California Native Plant Society Electronic Inventory (CNPSEI; CNPS 2012), and the Consortium of California Herbarium (Consortium 2012) applications, as well as a review of regional species lists produced by the USFWS (USFWS 2012a) and CDFW (CDFW 2011, 2012a, CDFW 2012b, and 2012c).

The pre-survey investigation also included a verification of whether or not the project site falls within areas designated as final or proposed USFWS Critical Habitat for federally threatened or endangered species (USFWS 2012b). The complete list of sensitive species (CNDDDB) and habitats that have been previously recorded within the vicinity of the project site was compiled, and all recorded locations of species and other resources were mapped and overlaid onto aerial imagery using Geographic Information Systems (GIS) software. The CNDDDB list of sensitive species included all database results for areas within 9 California USGS 7.5 minute topographic quadrangles.

BLUE biologist Michael Jefferson completed the preliminary USACE jurisdictional wetland delineation (pWD). Potential features identified were then investigated further to determine whether they met the criteria of a potentially jurisdictional feature. All features meeting the USACE guidance criteria were delineated. The region received no significant rainfall within the last week before the delineations were conducted. Rainfall patterns were atypical (drought conditions) for that time frame of the surveys.

Delineated boundaries of all features identified within the study area were recorded using a 1" = 100' aerial photograph.

Delineation of Potential Non-Wetland Waters of the U.S.

BLUE methods for the delineation of non-wetland WoUS was based on indicators for Ordinary High Water Mark (OHWM), following established criteria outlined in the *U.S. Army Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987), *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008a), and *A Field Guide to the Identification of the OHWM in the Arid West Region of the Western United States* (USACE 2008b).

All jurisdictional features within the study area were determined by the presence of OHWM indicators. This field

guide presents a method for delineating the lateral extent of the WoUS in the Arid West using stream geomorphology and vegetation response to the dominant stream discharge. BLUE biologists used this guidance in the field to determine the OHWM for all potentially jurisdictional non-wetland waters.

Three (3) criteria normally must be fulfilled in order to classify an area as a jurisdictional USACE wetland: (1) a predominance of hydrophytic vegetation, (2) the presence of hydric soils, and (3) the presence of wetland hydrology. Details of the application of these techniques are described below.

1. Hydrophytic Vegetation. The hydrophytic vegetation criterion is satisfied at a location if greater than 50% of all the dominant species present within the vegetation unit have a wetland indicator status of obligate (OBL), facultative wetland (FACW), or facultative (FAC) (USACE 1987). An *OBL indicator status* refers to plants that have a 99% probability of occurring in wetlands under natural conditions. A *FACW indicator status* refers to plants that usually occur in wetlands (67 to 99% probability) but are occasionally found elsewhere. A *FAC indicator status* refers to plants that are equally likely to occur in wetlands or elsewhere (estimated probability 34% to 66% for each). The wetland indicator status used for this report follows the *National List of Plant Species that Occur in Wetlands: California (Region 0)* (U.S. Fish and Wildlife Service 1988).

2. Hydric Soils. The hydric soil criterion is satisfied at a location if soils in the area can be inferred or observed to have a high groundwater table, if there is evidence of prolonged soil saturation, or if there are any indicators suggesting a long-term reducing environment in the upper 18 inches of the soil profile. Reducing conditions are most easily assessed using soil color. Soil colors were evaluated using the *Munsell Soil Color Charts* (Kollmorgen Corporation 1975).

3. Wetland Hydrology. The wetland hydrology criterion is satisfied at a location based upon conclusions inferred from field observations that indicate an area has a high probability of being inundated or saturated (flooded, ponded, or tidally influenced) long enough during the growing season to develop anaerobic conditions in the surface soil environment, especially the root zone (USACE 1987, 2008a, 2008b).

The field guide describes physical evidence that should be used to ascertain the lateral limits of jurisdiction; generally, more than one physical indicator or other means for determining the OHWM is used. The following physical indicators of OHWM were used in the field:

- Natural line impressed on the bank
- Shelving
- Destruction of terrestrial vegetation
- Presence of litter and debris
- Wracking
- Vegetation matted down, bent, or absent

- Sediment sorting
- Leaf litter disturbed or washed away
- Scour
- Deposition
- Bed and banks
- Water staining
- Change in plant community

Evaluation of SWRCB/RWQCB jurisdiction followed guidance from Section 401 of the CWA and follows the same jurisdictional areas as USACE, unless an isolated water is determined to be present. Isolated water features are not considered jurisdictional under USACE, but are still delineated using the OHWM or wetted area. Isolated water bodies are considered SWRCB/RWQCB jurisdictional under the Porter-Cologne Act.

Delineation of CDFW Jurisdiction

Evaluation of California Fish and Game Code jurisdiction followed the guidance of standard practices by CDFW personnel. CDFW jurisdiction was delineated by measuring the width of top of bank of watercourses, which equaled the bed and bank limits in these small systems, all of which are deeply incised under the currently existing condition. Riparian vegetation was observed within the study area, to the south of Manchester Avenue.

4.0 REGULATORY FRAMEWORK

FEDERAL JURISDICTIONS

Section 404 of the Clean Water Act

Section 404 of the Clean Water Act (CWA) requires that a permit be obtained from the U.S. Army Corps of Engineers (USACE) prior to the discharge of dredged or fill materials into any "waters of the United States", including wetlands. Waters of the United States are broadly defined in the USACE's regulations (33 CFR 328) to include navigable waterways, their tributaries, lakes, ponds, and wetlands. Wetlands are defined as "Those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that normally do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas." Such permits often require mitigation to offset losses of these habitat types so there is no net loss. Wetlands that are not specifically exempt from Section 404 regulations (such as drainage channels excavated on dry land and isolated wetlands) are considered to be "jurisdictional wetlands." Under certain circumstances where multiple resources are impacted and interagency consultation is required, the USACE may consult with the U.S. Environmental Protection Agency (USEPA), U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), State Water Resources Control Board (SWRCB), and the various Regional Water Quality Control Boards (RWQCBs) throughout the State in carrying out its discretionary authority under Section 404.

Section 401 of the CWA

A Section 401 Water Quality Certification, or waiver thereof, is required from the SWRCB or RWQCB before a Section 404 permit becomes valid. The RWQCB will review the project for consistency with the achievement of water quality objectives and the reasonable protection of beneficial uses designated in the Water Quality Control Plan for the San Diego Basin 9 (Basin Plan). In reviewing the project, the RWQCB will consider impacts to waters of the United States, in addition to filling of isolated wetlands, riparian areas, and headwaters (i.e., areas of high

resource value), hydromodification, applicable water quality objectives and designated beneficial uses, special status species, among other things. Collectively, wetland and water resources regulated by the SWRCB and RWQCB are referred to as waters of the State, and these resources may or may not include waters of the United States. Usually, mitigation is required (if not already a condition of the 404 permit) in the form of replacement or restoration of adversely impacted waters of the U.S.

Migratory Bird Treaty Act of 1918

The Migratory Bird Treaty Act (MBTA) of 1918 (16 USC 703-711) implements various treaties and conventions between the U.S. and Canada, Japan, Mexico and the former Soviet Union for the protection of migratory birds. It is enforced in the United States by the USFWS, and makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). Disturbance that causes nest abandonment and/or loss of reproductive effort (e.g., killing or abandonment of eggs or young) may be considered a “take” and is potentially punishable by fines and/or imprisonment. Migratory birds include geese, ducks, shorebirds, raptors, songbirds, and many other species.

Bald and Golden Eagle Protection Act

Enacted in 1940, this Act prohibits the take, transport, sale, barter, trade, import, export, and possession of bald eagles, making it illegal for anyone to collect bald eagles and eagle parts, nests, or eggs without authorization from the Secretary of the Interior. The Act was amended in 1962 to extend the prohibitions to the golden eagle.

Federal ESA of 1973

The United States Congress passed the FESA in 1973 to provide a means for conserving endangered and threatened species in order to prevent species extinction, extirpation, etc. The FESA has four major components: the Section 4 provisions for listing species and designating critical habitat; the Section 7 requirement for federal agencies to consult with the USFWS to ensure that their actions are not likely to jeopardize the continued existence of species or result in the modification or destruction of critical habitat-the Section 9 prohibition against “taking” listed species-and the Section 10 provisions for permitting the incidental take of listed species. The term “take” is defined by the FESA to include the concept of “harm,” which agency regulations define to include death or injury that results from modification or destruction of a species habitat (50 CFR 17.3).

Section 9 of the FESA

Section 9 of the FESA prohibits any person from “taking” an endangered animal species. Regulations promulgated by USFWS and National Oceanic and Atmospheric Administration make the “take” prohibition generally applicable to threatened animal species as well (50 CFR 17.71). Section 9 thus prohibits the clearing of habitat that results in death or injury to members of a protected species.

An authorization or permit to incidentally take listed species can be obtained either through the Section 7 consultation process or through the Section 10 incidental take permit process. In the context of Section 7, incidental take is authorized through an “incidental take statement” (ITS) that is issued consistent with a Biological Opinion. Measures required to conform to the ITS are contained in “reasonable and prudent measures,” as are the terms and conditions necessary to implement those measures. In the context of Section 10, incidental take is authorized through an “incidental take permit” (ITP) issued pursuant to Section 10(a)(1)(B).

Measures contained in the ITP reflect the measures set out in a habitat conservation plan developed by the applicant in conjunction with the USFWS.

Section 7 of the FESA

Section 7 of the FESA provides that each federal agency undertaking a federal action which could significantly affect FESA species shall consult with the Secretary of Interior or Commerce, that any actions authorized, funded, or carried out by the agency are “not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of lands determined to be critical habitat” (16 USC Section 1536(a)(2)). The term “agency action” is broadly defined in a manner that includes nearly all actions taken by federal agencies such as permitting or carrying out a project, as well as actions by private parties which require federal agency permits or approval (50 CFR Section 402.02). The consultation requirement of Section 7 is triggered upon a determination that a proposed action “may affect” a listed species or designated critical habitat (50 CFR Section 402.14(a)). If the proposed action is a “major construction” activity, the federal agency proposing the action must prepare a biological assessment to include with its request for the initiation of Section 7 consultation.

Included in the USFWS Biological Opinion is an Incidental Take Statement (ITS) that authorizes a specified level of take anticipated to result from the proposed action. The ITS contains “reasonable and prudent measures” that are designed to minimize the level of incidental take, adverse modification, or destruction to critical habitat, and that must be implemented as a condition of the take authorization (50 CFR Section 402.14(i)(5)).

The issuance of a Biological Opinion concludes formal consultation, but consultation can be reinitiated if the amount or extent of incidental take authorized is exceeded, the action changes, new information reveals effects of the action not previously considered, or a new species is listed or critical habitat is designated (50 CFR Section 402.16). Once the Biological Opinion is issued, the project applicant must implement the terms and conditions, and conservation measures, mandated by the USFWS. Monitoring and reporting is required to be coordinated with the USFWS during the implementation of conservation measures.

Section 10 of the FESA

Under Section 10(a)(1)(B) of the FESA, the USFWS may permit the incidental take of listed species that may occur as a result of an otherwise lawful activity. To obtain a Section 10(a)(1)(B) permit, an applicant must prepare a habitat conservation plan that meets the following five criteria: 1) the taking will be incidental to an otherwise lawful activity; 2) the applicant will, to the maximum extent practicable, minimize and mitigate the impacts of such taking; 3) the applicant will ensure that adequate funding for the plan will be provided; 4) the taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild; and, 5) other measures, if any, that the USFWS requires as being necessary or appropriate for purposes of the plan will be met (16 USC Section 1539(a)(2)(A)).

State of California (CDFW)

California Endangered Species Act

The CESA declares that deserving plant or animal species will be given protection by the State because they are of ecological, educational, historical, recreational, aesthetic, economic, and scientific value to the people of the State. CESA establishes that it is State policy to conserve, protect, restore, and enhance endangered species and

their habitats. Under State law, plant and animal species may be formally designated as rare, threatened, or endangered through official listing by the California Fish and Wildlife Commission. Listed species are given greater attention during the land use planning process by local governments, public agencies, and landowners than are species that have not been listed.

CESA authorizes that “private entities may take plant or wildlife species listed as endangered or threatened under FESA and CESA, pursuant to a federal incidental take permit issued in accordance with Section 10 of the FESA, if the CDFW certifies that the incidental take statement or incidental take permit is consistent with CESA (Fish and Game Code Section 2080.1(a)).

Section 2081(b) and (c) of the CESA allows CDFW to issue an incidental take permit for a state-listed threatened and endangered species only if specific criteria are met. These criteria can be found in Title 14 CCR, Sections 783.4(a) and (b). No Section 2081(b) permit may authorize the take of “fully protected” species and “specified birds.” If a project is planned in an area where a fully protected species or specified bird occurs, an applicant must design the project to avoid all take; the CDFW cannot provide take authorization under CESA. On private property, endangered plants may also be protected by the Native Plant Protection Act (NPPA) of 1977. Threatened plants are protected by CESA, and rare plants are protected by the NPPA; however, CESA authorizes that “Private entities may take plant species listed as endangered or threatened under the FESA and CESA through a federal Incidental Take Permit (ITP) issued pursuant to Section 10 of the FESA, if the CDFW certifies that the ITS or ITP is consistent with CESA.” In addition, CEQA requires disclosure of any potential impacts on listed species and alternatives or mitigation that would reduce those impacts.

CEQA: Treatment of Listed Plant and Animal Species

FESA and CESA protect only those species formally listed as threatened or endangered (or rare in the case of the State list). Section 15380 of the CEQA Guidelines independently defines “endangered” species of plants or animals as those whose survival and reproduction in the wild are in immediate jeopardy and “rare” species as those who are in such low numbers that they could become endangered if their environment worsens. Therefore, a project normally will have a significant effect on the environment if it will substantially affect a rare or endangered species of animal or plant or the habitat of the species. The significance of impacts to a species under CEQA must be based on analyzing actual rarity and threat of extinction despite legal status or lack thereof.

Sections 1601 to 1603 of the California Fish and Game Code

Streambeds and other drainages that occur within the project proponent service area and proposed CIP project sites are subject to regulation by the CDFW. The CDFW considers most drainages to be “streambeds” unless it can be demonstrated otherwise. A stream is defined as a body of water that flows at least periodically or intermittently through a bed or channel with banks and supports fish or other aquatic life. This includes watercourses having a surface or sub-surface flow that supports, or has supported, riparian vegetation. CDFW jurisdiction typically extends to the edge of the blue-line streams, and therefore, usually encompasses a larger area than Corps jurisdiction.

Sections 3503, 3503.5, and 3800 of the California Fish and Game Code

These sections of the Fish and Game Code prohibit the take or possession of birds, their nests, or eggs. Disturbance that causes nest abandonment and/or loss of reproductive effort (killing or abandonment of eggs or

young) is considered a take. Such a take would also violate federal law protecting migratory birds. ITPs are required from the CDFW for projects that may result in the incidental take of species listed by the State as endangered, threatened, or candidate species. The wildlife agencies require that impacts to protected species be minimized to the extent possible and mitigated to a level of insignificance.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act provides for statewide coordination of water quality regulations. The Act established the SWRCB as the State-wide authority and nine separate RWQCBs to oversee smaller regional areas within the State. The Act authorizes the SWRCB to adopt, review, and revise Water Quality Control Policies for all waters of the State (including both surface and ground waters); and directs the RWQCBs to develop regional Basin Plans. Section 13170 of the California Water Code also authorizes the SWRCB to adopt water quality control plans on its own initiative. The Water Quality Control Plan for the San Diego Basin 9 (Basin Plan) is designed to preserve and enhance the quality of water resources in the San Diego region for the benefit of present and future generations.

The purpose of the plan is to designate beneficial uses of the region's surface and ground waters, designate water quality objectives for the reasonable protection of those uses, and establish an implementation plan to achieve the objectives.

California Natural Community Conservation Planning Act of 1991

The NCCP Act is designed to conserve habitat-based natural communities at the ecosystem scale while accommodating compatible land uses in coordination with CESA. CDFW is the principal state agency implementing the NCCP Program. The Act established a process to allow for comprehensive, long-term, regional, multi-species, and habitat-based planning in a manner that satisfies the requirements of the State and FESAs (through a companion regional habitat conservation plan). The NCCP program has provided the framework for innovative efforts by the State, local governments, and private interests, to plan for the protection of regional biodiversity and the ecosystems upon which they depend. NCCPs seek to ensure the long-term conservation of multiple species, while allowing for compatible and appropriate economic activity to proceed.

Local Jurisdiction

Multiple Habitat Conservation Program

The MHCP is a comprehensive, multiple jurisdictional planning program designed to develop an ecosystem preserve in northern San Diego County. Implementation of the regional preserve system is intended to protect viable populations of key sensitive plant and animal species and their habitats, while accommodating continued economic development and quality of life for residents of the North County region. The MHCP is one of several large multiple jurisdictional habitat planning efforts in San Diego County, each of which constitutes a subregional plan under the California NCCP Act of 1991. The MHCP includes seven incorporated cities in northwestern San Diego County: Carlsbad, Encinitas, Escondido, Encinitas, San Marcos, Solana Beach, and Vista. These jurisdictions may implement their respective portions of the MHCP through citywide "subarea" plans, which describe the specific implementing mechanisms each city will institute for the MHCP. The goal of the MHCP is to conserve approximately 19,000 acres of habitat, of which roughly 8,800 acres (46 percent) are already in public ownership and contribute toward the habitat preserve system for the protection of more than 80 rare, threatened or endangered species.

City of Encinitas General Plan

The City of Encinitas General Plan is the primary source of long-range planning and policy direction used to guide growth and preserve the quality of life within the City of Encinitas. The Encinitas General Plan states that a goal of the City is to analyze proposed land uses to ensure that the designations would contribute to a proper balance of land uses within the community. The Encinitas General Plan contains stated community goals and policies designed to shape the long-term development of the City, as well as protect its environmental, social, cultural, and economic resources.

The following general and site-specific standards guidelines for preserve design (onsite conservation) have been applied during planning of this Projects as it is located within a softline area of the city (formerly referred to as the mitigation ratio areas). As stated in the MHCP, section 4.3.1 General Standards:

Wetland/Wetland Buffer Policies

No Net Loss Policy For all vegetation communities listed by the MHCP as wetland vegetation communities, the city shall require, in priority order, maximum avoidance of project impacts, minimization of impacts, and mitigation of impacts (see also Section 3.6.1 of the MHCP Plan). Mitigation of unavoidable impacts shall be designed to achieve no net loss of both wetland acreage *and biological value* within the city. This is consistent with existing wetland policies of the CDFG.

Mitigation for Unavoidable Impacts. To achieve the no net loss standard, mitigation for unavoidable impacts (e.g., wetland habitat creation or restoration) shall preferably occur onsite. Alternatively, offsite mitigation may occur as long as such mitigation demonstrably contributes to the Encinitas preserve design and biological value (e.g., by adjacency to other preserve areas). Offsite mitigation should preferentially occur within the same watershed as the impact. In any case, wetland mitigation sites shall be designated as preserve lands and managed for biological values (see also Section 3.6.1 of the MHCP Plan).

Conservation and Buffer Requirements. Wherever development or other discretionary actions are proposed in or adjacent to wetland or riparian habitats, the wetland or riparian areas shall be designated as biological open space and incorporated into the preserve. Biological buffers that are a minimum of 100 feet wide in saltwater wetland areas and 50 feet wide in freshwater riparian areas must be established adjacent to preserved habitat, unless smaller buffers are demonstrated to be appropriate and proposed reductions in buffer widths are approved by the wildlife agencies. Within the biological buffer, no new development or other uses considered incompatible with adjacent preserve goals shall be allowed, although uses considered compatible in preserve buffer areas may be established (e.g., trails or utilities; see MHCP Plan Section 6.2 for a complete discussion of compatible and incompatible land uses adjacent to the preserve, and Encinitas Subarea Plan Section 4.2.1 for a complete discussion of conditionally compatible land uses and activities within the preserve). In addition, the buffer area shall be managed for natural biological values as part of the preserve system. In the event that natural habitats do not currently (at the time of proposed action) cover the buffer area, vegetation appropriate to the location and soils shall be planted as a condition for the proposed action.

5.0 EXISTING CONDITIONS

The following discussion summarizes the existing and potentially present biological resources onsite and within the project footprint.

5.1 Vegetation

Habitat descriptions are based on the Terrestrial Vegetation Communities in San Diego County based in Holland's Descriptions (Oberbauer 2010), however, it has been shown that habitats on the project sites in San Diego County are often not pristine and rarely fit into one description. Therefore, the best-fit definition based on the current descriptions and dominant plant species has been applied. Two areas supporting jurisdictional areas, freshwater marsh and unvegetated ephemeral waters of the U.S. (channel), were observed onsite.

A total of six habitat types occur within the project site (Table 2): freshwater marsh, unvegetated ephemeral waters of the U.S. (channel), coastal sage scrub, agricultural, urban disturbed (previously graded), and developed. A complete list of plant species observed onsite is included in Appendix A (Table 2).

TABLE 2
Biological Resources

Habitat Type	Acreage
ACOE/CDFW ephemeral non-wetland water*	0.08
CDFW Fresh/Saltwater Marsh*	0.13
Coastal Sage Scrub*	1.81
Agricultural	15.74
Disturbed habitat	0.68
Developed	0.59
Total	19.03

*Sensitive Habitat

Diegan Coastal Sage Scrub

Coastal Sage Scrub (CSS) is considered a coastal scrub vegetation alliance (CNPS, 2009). It is a native plant community characterized by a variety of soft, low, aromatic, drought-deciduous shrubs. California sagebrush scrub rarely occurs as a continuous vegetation community but rather occurs in a patchy or mosaic distribution pattern throughout its range (USFWS 1997). Shrub cover is rarely 100% (O'Leary 1990a and 1990b; Beyers and Wirtz II 1995).

The 1.81 acres of Diegan coastal sage scrub on-site is of high quality, with little to no areas supporting concentrated non-native species. This habitat is located on the northern portion of the Property on and adjacent to the coastal bluff located to the north of the site. The dominant species within the CSS are California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), and sages (*Salvia* spp.), with scattered evergreen shrubs, including lemonadeberry (*Rhus integrifolia*), laurel sumac (*Malosma laurina*), and toyon (*Heteromeles arbutifolia*). Other, less frequent, constituents include spiny redberry, deerweed, and yellow bush-penstemon. The native understory species include foothill stipa, ashy spike-moss, chalk live-forever. While not in high

concentrations, the non-native vegetation occurring in the scrub (generally within the herb layer) includes: black mustard (*Brassica* spp.), wild oats (*Avena barbata*), and foxtail chess (*Bromus madritensis* ssp. *rubens*).

Agricultural

Agricultural designation is for those areas that are under agricultural use, with irrigation, and are maintained. These areas support no sensitive species occurrence potential. Onsite, the 14.52 acres of agricultural use is the dominant feature and is comprised of fields, roads and irrigation infrastructure.

Urban/Disturbed

Urban/Disturbed land consists of all land graded, disturbed and/or covered by non-native ornamental (landscape) vegetation. For the purposes of this assessment, woodlands comprised of eucalyptus trees (*Acacia* spp.) are also considered urban. Non-native plant species typical of urban/developed areas include ornamental trees such as pine (*Pinus* spp.), pepper (*Schinus* spp.), palm (*Washingtonia* spp., *Phoenix* spp.), and gum; shrubs such as acacia (*Acacia* spp.) and oleander (*Nerium oleander*); and, groundcover such as turf grass, red apple (*Aptenia cordifolia*), and hottentot-fig (*Carpobrotus edulis*), Russian thistle (*Salsola tragus*), telegraph weed (*Heterotheca grandiflora*), horehound (*Marrubium vulgare*), and sow-thistle (*Sonchus oleraceus*). Disturbed land typically provides little habitat for wildlife species.

Onsite, the 0.68 acres of urban/disturbed land is generally located on the perimeter of the Property and has been historically graded (slopes, and pads) and are maintained.

Developed

This designation is used for the portion of the site that includes the areas that have previously been converted to pavement, paths, and structures. Onsite, this area totaling 1.81 acres is limited to the development of the roads and business structures. This is inclusive of the south west corner of the Property that Caltrans assumed by eminent domain, portions of Manchester Ave. and the drainage brow ditch located on the north side of the road (Figure 4).

WETLAND DELINEATION (Preliminary) RESULTS

The completed onsite (BLUE) and offsite (RECON) preliminary protocol wetland delineation identified CDFW and ACOE/CDFW jurisdictional areas (Figure 5-6). Off-site CDFW jurisdictional Fresh/saltwater Marsh (wetlands to be temporarily impacted) and on-site CDFW/ACOE jurisdictional Unvegetated Ephemeral Channel (permanent impacts to non-wetland waters).

Fresh/Saltwater Marsh (CDFW Jurisdictional)

Fresh/saltwater Marsh habitat occurs in open bodies of fresh water with little current flow, such as ponds, and to a lesser extent around seeps and springs. These marshes occur in areas of permanent inundation by freshwater without active stream flow. Coastal and Valley Freshwater Marsh is a freshwater marsh community which occasionally occurs along the coast and in coastal valleys near river mouths and around the margins of lakes and springs. Marsh communities, as with all wetland habitats, have been greatly reduced throughout their entire range and continue to decline as a result of urbanization and are considered sensitive by State and federal resource agencies.

Onsite, the observed Fresh/saltwater Marsh, a jurisdictional wetland totaling 0.13 acres, occurs within the north-

western most portion of the Property and located on the south side of Manchester Ave (Figure 4). This habitat is within the San Elijo Lagoon. Typically, and in this location, this jurisdictional vegetation community is comprised of typical perennial emergent monocots including: Salty Dodder (*Cuscuta salina*), Alkali heath (*Frankenia grandifolia*), Saltgrass (*Distichlis spicata*), Pickleweed (*Salicornia virginica*) and Southwestern spiny rush (*Juncus acutus*).

Offsite, on the southern side of Manchester Avenue, RECON completed a preliminary wetland delineation (attached) surrounding the existing outlets (which are to be replaced). The following vegetation communities or land cover types were mapped within the offsite survey areas: wetland habitats, Diegan coastal sage scrub, disturbed habitat, and urban/developed land.

Non-Wetland Water of the U.S.; Unvegetated Ephemeral Channel (ACOE/CDFW Jurisdictional Habitat)

The Unvegetated Non-Wetland Waters of the U.S Ephemeral Channel is located onsite in the form of a managed and maintained soft bottom channel, totaling 0.08 acres, which follows the general historical course of this natural drainage feature. The channel enters the Property from the west adjacent to the toe of the bluff and the Caltrans offsite Project and exits the Project at the southern Property Line (PL) draining into a roadside ditch which then enters the San Elijo Lagoon. Waddles are located within the channel, and due to regular maintenance, no vegetation was observed within the channel, which is on average 3 feet wide.

The onsite portion of the developed drainage ditch/flood control infrastructure associated with the development of Manchester Avenue, and located on the northern side of the street, is not a natural drainage channel and is not located in the historic location of a natural channel. Therefore, this developed and maintained flood control brow ditch/street infrastructure is not considered jurisdictional.

5.2 Wildlife

A total of 8 wildlife species were identified onsite. A complete list of wildlife species observed onsite is included as Appendix B (Table 4).

Invertebrates observed included butterflies and bees. The reptile species observed onsite include the western fence lizard (*Sceloporus occidentalis*). Bird species observed included a Turkey vulture, common raven (*Corvus corax*), mourning dove (*Zenaida macroura*), scrub jay (*Aphelocoma californica*), and house finch (*Carpodacus mexicanus*). No mammals were observed or detected onsite.

5.3 Sensitive Resources

Sensitive or special interest plant and wildlife species and habitats are those which are considered rare, threatened, or endangered within the state or region by local, state, or federal resource conservation agencies. Sensitive habitats, as identified by these same groups, are those which generally support plant or wildlife species considered sensitive by these resource protection agencies or groups. Sensitive species and habitats are so called because of their limited distribution, restricted habitat requirements, particular susceptibility to human disturbance, degradation due to development or invasion by non- native species, or a combination of all of these factors.

In addition to CEQA and MHCP City Guidelines for Determining Significance, the following were used in the

determination of sensitive biological resources: U.S. Fish and Wildlife Service (USFWS), California Native Plant Society (CNPS), and California Department of Fish and Wildlife (CDFW). An explanation of the sensitivity codes used in this report is included in Appendix E.

5.3.1 Sensitive Habitats

The site and surrounding properties are part of a designated Focused Planning Area (FPA) in the City. Onsite, the 'softline' FPA is comprised of a total of three sensitive habitat types: coastal sage scrub, jurisdictional freshwater marsh and jurisdictional unvegetated non-wetland waters (ephemeral channel running through the existing agricultural fields). Offsite to the south is the Bataquitos Lagoon, a 'Hardline' FPA.

5.3.2 Sensitive Plants

Sensitive or special interest plant species are those which are considered rare, threatened, or endangered within the state or region by local, state, or federal resource conservation agencies. Sensitive plant species are so called because of their limited distribution, restricted habitat requirements, or particular susceptibility to human disturbance, or a combination of these factors. Sources used for the determination of sensitive plant species include: USFWS (2016), CDFW (2015), CNPS (2013), and CNDDB (2015).

5.3.2.1 Sensitive Plants Observed

No sensitive plant species were observed onsite at the time of the surveys. A complete list of all Plants Species observed is described in Table 3.

5.3.2.2 Sensitive Plant Species with the Potential to Occur Onsite (not observed)

A complete list and explanation as to the potential occurrence of all Sensitive Plants Species with the Potential to Occur is described in Appendix C. Thirty -one sensitive plants were assessed for the potential to occur onsite and are discussed in Appendix C.

In summary, of the thirty-one sensitive plant species assessed, none has greater than a moderate potential to occur onsite due to lack of observations in the area and onsite as well as a lack of appropriate habitat.

5.3.3 Sensitive Animals

Sensitive or special interest wildlife species and habitats are those which are considered rare, threatened, or endangered within the state or region by local, state, or federal resource conservation agencies. Sensitive species are so called because of their limited distribution, restricted habitat requirements, or particular susceptibility to human disturbance, or a combination of these factors. Sources used for the determination of sensitive biological resources include: USFWS, CDFW. Additional species receive federal protection under the Bald Eagle Protection Act and the Migratory Bird Treaty Act and Convention for the Protection of Migratory Birds and Animals.

The CDFW also lists species as threatened or endangered, or candidates for listing as threatened or endangered. Lower sensitivity animals may be listed as "species of special concern" (CDFW). The CDFW further classifies some species under the following categories: "fully protected," "protected furbearer," "harvest species," "protected amphibian," and "protected reptile." The designation "protected" indicates that a species may not be taken or possessed except under special permit from the CDFW; "fully protected" indicates that a species can be taken only for scientific purposes. The designation "harvest species" indicates that take of the species is controlled by

the state government.

5.3.3.1 Sensitive Wildlife Observed

A single sensitive wildlife species was observed flying overhead, a Turkey Vulture (*Cathartes aura*). U.S. Fish and Wildlife Service (USFWS) protocol coastal California gnatcatcher (CAGN) surveys have been completed and are negative for onsite CAGN (attached). A complete list all Sensitive Wildlife with the Potential to Occur is described in Appendix D.

5.3.3.2 Sensitive Wildlife Species with the Potential to Occur Onsite (not observed)

The subject property supports high quality CSS habitat which is appropriate for the coastal California gnatcatcher. A complete list and explanation as to the potential occurrence of all Sensitive Wildlife with the Potential to Occur is described in Appendix D. To determine presence/absence of the gnatcatcher, protocol surveys were completed in the spring of 2019. No gnatcatchers were observed onsite during the completed surveys (BLUE, October 21, 2017).

5.3.3.3 Raptors

The Property contains numerous scattered mature trees as well as mature ornamental landscaping within the south-west corner of the Property (adjacent to the office and storage structures), which is part of the property to be utilized for the Caltrans project. No appropriate nesting areas for raptors are located within the proposed Project site (consisting of the agricultural portions of the site). Mature trees can support raptor nesting. Raptors are large predatory or scavenger birds that typically require tall trees for perching and nesting associated with adjacent open grasslands to forage. Due to declining habitat and the associated declining numbers of these species on the whole, many raptor species have been designated as California Species of Special Concern by the CDFW. These species are protected, especially during their critical nesting and wintering stages. Raptors are protected under the CDFW California Raptor Protection Act (Title 14, Section 670). No historic raptor nests were observed within the trees onsite.

5.4 Wildlife Corridors

Development within San Diego County has reduced the total available open space for wildlife populations, and in some instances, created isolated "islands" of habitat. In general, corridors and linkages are smaller constrained areas of habitat that connect larger areas of habitat which are otherwise separated by rugged terrain, changes in vegetation, or urban development. This allows for an exchange of gene pool between wildlife populations, which increases the genetic viability of otherwise isolated populations. Wildlife corridors are especially important for species with large habitat ranges or seasonal migrations. A corridor is a specific route that is used for the movement and migration of species, and may be different from a linkage in that it represents a smaller or narrower avenue for movement. A linkage is an area of land that supports or contributes to the long-term movement of wildlife and genetic exchange by providing live-in habitat that connects to other habitat areas. Many linkages occur as stepping-stone linkages that are comprised of fragmented archipelago arrangement of habitat over a linear distance. In either case, corridors and linkages will be comprised of land features which accommodate the movement of all sizes of wildlife, including large animals on a regional scale. Their contributing areas will support adequate vegetation cover, providing visual continuity and long lines of sight, so as to encourage the use of the corridor by all types of wildlife. In San Diego County, important corridors/linkages have been identified on the local and regional scale in establishing a connection between the northern and southern

regions.

The property is itself generally developed and actively utilized with the surrounding area to the north and east dominated by high density development. While the San Elijo Lagoon and Open Space is immediately adjacent to the southern property line, the Property located on the north side of Manchester Ave. is not within an existing recognized habitat corridor.

6.0 PROJECT IMPACTS

This section addresses potential direct, indirect, and cumulative impacts to biological resources that would result from implementation of the proposed project and provides analyses of significance for each potential impact.

Direct Impacts are immediate impacts resulting from temporary and permanent removal of habitat through grading and Brush Management Zone (BMZ) activities. As designed, the proposed Projects' structures are sited 100 feet away from the preserved habitat and surrounded by paved/landscaped/maintained areas; as a result, the Brush Management Zone would not impact sensitive habitat.

Indirect Impacts result from changes in land use adjacent to natural habitat and primarily result from adverse "edge effects;" either short-term indirect impacts related to construction or long-term, chronic indirect impacts associated with urban development.

Cumulative Impacts refer to incremental individual environmental effects of two or more projects when considered together. These impacts taken individually may be minor, but collectively significant as they occur over a period of time.

6.1 Impact Analysis

No species identified as a candidate, sensitive, or special-status species has been recorded onsite and all sensitive habitat has been avoided and preserved. Therefore, the Project –would not have a significant effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

All onsite riparian habitat or other sensitive natural community has been avoided and preserved. Therefore, the Project would not have a significant effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

The Project will impact and mitigate for the 0.08 acres of unvegetated non-wetland waters to a level below significance. Therefore, the Project will not - Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

The Project will impact and mitigate for the 12 square feet of permanent impacts and 777 square feet of temporary impacts to the offsite CDFW jurisdictional wetland habitat(s) to a level below significance. Therefore, the Project will not - Have a substantial adverse effect on state protected wetlands.

All onsite riparian habitat(s) or other sensitive natural community, as well as the potential existing wildlife corridors and nursery sites has been avoided and preserved and nesting season pre-constructions surveys are required. Therefore, the Project will not Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

Direct Impacts

Potentially The proposed project will impact, both on and offsite, a total of 16.69 acres. This total is comprised of the following vegetation types: agricultural, developed, ACOE/CDFW jurisdictional non-wetland water ephemeral drainage channel, offsite CDFW jurisdictional marsh wetlands (temporary impacts, 777 square feet, 12 square feet permanent impacts; Table 5).

A total of 1.43 acres of land within the SW corner of the property has been taken by eminent domain (within the given easement) to be developed as the Caltrans Manchester Park-N-Ride. As a result, while the Property totals 19.03 acres, the proposed Project 'Property' totals approximately 17.6 acres of area onsite.

A total of 16.69 acres of permanent and temporary impacts are proposed; this is broken down as follows: 12.94 acres are to be permanently impacted/developed onsite and the offsite improvements total approximately 3.75 acres.

As described in the subsequent section 6.3.1 *Significant Impacts*, impacts to the onsite ACOE/CDFW jurisdictional non-wetland water ephemeral drainage channel and the temporary impacts to approximately 777 square feet of offsite CDFW jurisdictional wetlands are considered potentially significant if not mitigated.

No sensitive plant or wildlife species were observed onsite, and due to the condition of the site, none would be expected to occur onsite or within the offsite development envelope.

TABLE 5
Proposed Project Impacts and
Mitigation Requirements

Habitat Type	Acreage	Impact onsite/offsite	Impact perm/temp	Mitigation Ratio	Mitigation Acreage	Open Space Lots B and C
ACOE/CDFW ephemeral non-wetland water*	0.08	0.08/0.0	0.08/0.0	1:1	0.08	0.0
CDFW Freshwater Marsh*	0.13	0.0/0.018	0.0/0.018	1:1	0.018**	0.13
Coastal sage Scrub*	1.81	0.0/0.0	0.0/0.0	N/A	N/A	1.81
Agricultural	15.74	12.18/0.0	12.18/0.0	N/A	N/A	4.32
Disturbed habitat	0.68	0.68/0.0	0.68/0.0	N/A	N/A	0.0
Developed	0.59	0.0/3.73	3.73/0.0	N/A	N/A	0.0
Total	19.03	12.94/3.75	16.67/0.018		0.098	6.26

* Denotes a Sensitive Habitat

**Offsite temporary impacts to CDFW jurisdictional marsh to be immediately restored in place as mitigation

The Project will impact and mitigate for the impacts to the onsite 0.08 acres of ACOE/CDFW jurisdictional unvegetated non-wetland waters to a level below significance.

The Project will impact and mitigate for the offsite 12 square feet of permanent impacts and 777 square feet of temporary impacts to the offsite CDFW jurisdictional wetland habitat(s) to a level below significance. Therefore, the Project will not - Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Potential Indirect Impacts

During construction of the project, short-term indirect impacts include dust and noise which could temporarily disrupt habitat and species vitality or construction related soil erosion and run-off. Long-term indirect impacts may include intrusions by humans and domestic pets, noise, lighting, invasion by exotic plant and wildlife species, use of toxic chemicals (fertilizers, pesticides, herbicides, and other hazardous materials), soil erosion, litter, fire, and hydrological changes (e.g., groundwater level and quality).

As described in the Preserve Adjacency Guidelines, the following potential indirect impacts have been assessed and avoided; as described below in Section 6.3, Indirect Impacts - Preventative Mitigation.

Drainage and Toxics. All new and proposed parking lots and developed areas in and adjacent to the preserve shall not drain directly into the preserve. All developed and paved areas and agricultural and recreational use areas shall prevent the release of toxins, chemicals, petroleum products, exotic plant materials, and other elements that might degrade or harm the natural environment or ecosystem processes within the preserve.

Erosion and Sedimentation. All new development adjacent to preserve areas shall be required to adhere to measures outlined in the city's Grading, Erosion, and Sediment Control Ordinance to avoid degradation of lagoons, other wetland habitats, and upland habitats from erosion and sedimentation.

Lighting. Lighting of all developed areas adjacent to the preserve shall be directed away from the preserve. Where necessary, development shall provide adequate shielding, berming, or other methods to protect the preserve and sensitive species from night lighting.

Noise. Land uses adjacent to the preserve shall be designed to minimize noise impacts. Berms and walls shall be constructed adjacent to commercial areas, recreational areas, and any other use that may introduce noises that could impact or interfere with wildlife utilization of the preserve. Typically, any activities that generate noise levels greater than 60 decibels (A-weighted scale) within 500 feet of nesting sensitive bird species (such as California gnatcatcher, least Bell's vireo, southwestern willow flycatcher, California least tern, and snowy plover) shall be conducted outside of the breeding season or include sound attenuation devices. The ambient sound level onsite supporting the potential nesting habitat is typically above 60dB and is the likely reason no evidence of ongoing or historic nesting was observed during the surveys.

Barriers. The Proposed development adjacent to the preserve will provide barriers (e.g., noninvasive vegetation, rocks/boulders, fences, walls, and signs) along the preserve boundary and the proposed trail(s) to direct public access to appropriate entrance locations and reduce domestic animal predation.

Landscaping Restrictions. No invasive non-native plant species shall be introduced into areas immediately adjacent to the Preserve.

Fire and Brush Management.

After review, the Fire Marshal is not requiring brush management for this Project. As a result of the distance of the Project footprint to the Preserve, specific additional measures, related to the adjacent Preserve, would not be warranted for the project.

Cumulative Impacts

The implementation of mitigation measures for direct/indirect impacts would avoid cumulatively considerable impacts. All native onsite habitat has been avoided and will be conserved. The permanent impact to the 0.08 acres of jurisdictional unvegetated, non-wetland, ephemeral waters and 12 sq. ft. of jurisdictional CDFW wetlands will be mitigated and no-net-loss of wetlands will be required along with the required additional agency permitting. All 777 sq. ft. of temporary impacts to the jurisdictional CDFW wetlands will be mitigated with the immediate restoration of the impacted areas (recontouring/seeding). As a result, the project will not have a cumulatively considerable or significant impact to biological resources.

6.2 Potentially significant Impacts

Potentially significant impacts to two sensitive habitat/areas are proposed to occur (permanent and temporary). These potentially significant impacts will be mitigated to reduce the level of impact to less than significant. The final specific mitigation measures for the jurisdictional impacts will be determined during the consultation with the required ACOE/RWQCB/CDFW agency permitting process.

- Onsite: Permanent impacts to 0.08 acres of ACOE/CDFW jurisdictional unvegetated, non-wetland, ephemeral water channel
- Offsite: Permanent impact to 12 sq. ft. of jurisdictional CDFW wetlands
- Offsite: Temporary impact to 777 sq. ft. CDFW jurisdictional wetland

Sensitive Habitat

Sensitive habitat(s) were documented onsite; freshwater marsh, coastal sage scrub and jurisdictional non-wetland channel. The jurisdictional non-wetland water ephemeral drainage channel and offsite impacts to CDFW jurisdictional freshwater marsh are the sensitive area/habitat to be impacted. All onsite freshwater marsh and coastal sage scrub would be preserved.

Onsite

The 0.08 acres of onsite jurisdictional non-wetland water ephemeral drainage channel would be permanently impacted. All flows would be captured at the Property Line (on the west side) and conveyed through the property within a proposed underground stormwater pipe system that would discharge the flows in the same location (flows entering on the north - and out on side of Manchester Avenue). In addition, the flows have been designed by the engineer to maintain the existing flow rate (to prevent erosion, etc.) and these waters would be kept separate from Project flows (no mixing) and would directly flow into the Lagoon in the existing location.

Offsite

In order to install the offsite retrofit outlets on the south side of Manchester Avenue effectively (de-minimus) no permanent impacts are proposed (12.0134 square feet or 0.0003 Acres) to the identified jurisdictional habitat.

Temporary impacts totaling 777.0788 square feet or 0.0178 acres are proposed to the offsite CDFW jurisdictional wetland habitat. These 777 sq. ft. would be recontoured to the natural grade and restored to the original state.

All impacts are only within the jurisdiction of the CDFW as designated on Figure 6, as delineated by RECON. A breakdown of the offsite impacts required for the installation of the storm drain outlets is provided below:

Outlet #1:

- Permanent Impact area: 6.8SF
- Temporary Construction Impact Area (area to be restored after construction): 371.0 SF
- Total Combined Impact Area: 377.8SF

Outlet #2:

- Permanent Impact area: 5.3 SF
- Temporary Construction Impact Area (area to be restored after construction): 109.0 SF
- Total Combined Impact Area: 114.3 SF

Outlet #3:

- Permanent Impact area: 0 SF
- Temporary Construction Impact Area (area to be restored after construction): 180.4SF
- Total Combined Impact Area: 180.4 SF

Outlet #4:

- Permanent Impact area: 0 SF
- Temporary Construction Impact Area (area to be restored after construction): 116.7 SF
- Total Impact Area: 116.7 SF

TOTALS:

- Permanent Impact area: 12.0 SF or 0.0003 AC
- Temporary Construction Impact Area (area to be restored after construction): 777.1 SF or 0.018 AC
- Total Combined Impact Area: 789.1 SF or 0.018 AC

As a result of these proposed on (ACOE/CDFW jurisdiction) and offsite CDFW jurisdictional impacts, additional permitting from the ACOE, RWQCB and CDFW will be required.

Sensitive Plant Species

No impacts to sensitive plant species are expected to occur and mitigation would not be required. All sensitive habitat that could potentially support sensitive species will be Avoided and Preserved.

Sensitive Wildlife Species

Spring 2019 protocol CAGN surveys were completed and none were observed onsite. Gnatcatchers were observed offsite immediately offsite in the north east corner and to the north (in the canyon). No sensitive wildlife species were documented onsite. Due to the site conditions and the implementation of the proposed preventative mitigation measures (see Section 6.3, below), no impacts to sensitive wildlife species are expected to occur and specific mitigation measures would not be required.

Because raptors have been historically observed in the area and there are large open areas onsite, raptor foraging within this area may occur. However, as this area is currently and historically utilized by human activity, no historic raptor nest has been observed onsite, the loss of this area does not constitute a potentially significant

habitat impact or loss of significant raptor foraging area.

6.3 PROPOSED MITIGATION

Under CEQA, mitigation is required for all significant biological impacts (e.g. impacts within highly constrained areas). In addition, the CDFW 1600 and the ACOE 404 permit process generally require mitigation for the loss of wetland resources. The following mitigation measures are recommendations to locally important biological impacts.

Project Impact and Mitigation Summary

- No species identified as a candidate, sensitive, or special-status species has been recorded onsite and all sensitive habitat has been avoided and preserved. Therefore, the Project –would not have a significant effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.
- All onsite riparian habitat or other sensitive natural community has been avoided and preserved. Therefore, the Project would not have a significant effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.
- The Project will impact and mitigate for the 0.08 acres of unvegetated non-wetland waters to a level below significance. Therefore, the Project will not - Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- The Project will impact and mitigate for the 12 square feet of permanent impacts and 777 square feet of temporary impacts to the offsite CDFW jurisdictional wetland habitat(s) to a level below significance. Therefore, the Project will not - Have a substantial adverse effect on state protected wetlands.
- All onsite riparian habitat(s) or other sensitive natural community, as well as the potential existing wildlife corridors and nursery sites has been avoided and preserved and nesting season pre-constructions surveys are required. Therefore, the Project will not Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- The Project will impact and mitigate for the 0.08 acres of unvegetated non-wetland waters to a level below significance. Therefore, the Project will not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

6.3.1 Direct Impacts - Mitigation

The 0.08 acres of onsite jurisdictional (ACOE/RWQCB/CDFW) non-wetland ephemeral waters and 12 square feet of CDFW jurisdictional wetlands (offsite) would be permanently impacted; mitigation would be required (Table 5).

An Open Space easement will be placed over 6.26 acres, which includes the 100% preserved CSS (1.81 acres) and freshwater marsh (0.13 acres) as well as the northern portion of the existing agricultural operation.

The offsite temporary impacts to the CDFW jurisdictional wetland totaling 777.1 square feet would be immediately recontoured to the natural grade and restored as the appropriate type of wetland (salt/freshwater marsh). No additional Mitigation Measures for the temporary jurisdictional impacts are required, as determined at the batching meetings.

The Project has been presented to the ACOE, RWQCB and CDFW at batching meetings to determine the status of the onsite resources and viable mitigation for impacts to the jurisdictional non-wetland ephemeral waters. The impacts to the non-wetland channel were discussed and mitigation was determined to consist of the purchase of 1:1 wetland mitigation credit (0.08 acres) from the San Luis Rey River Mitigation Bank and the donation of the preserved freshwater marsh (0.13 acres) and coastal sage scrub (1.81 acres) to the San Elijo Lagoon Conservancy.

The Project will impact and mitigate for the 0.08 acres of unvegetated non-wetland waters to a level below significance. Therefore, the Project will not - Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

6.3.2 Indirect Impacts - Preventative Mitigation Measures

In order to prevent potential significant indirect impacts to the proposed OS, sensitive adjacent upland habitats and/or the Bataquitos Lagoon, the following adjacency guidelines have been identified and addressed/incorporated into the Project through the CEQA process.

Drainage and Toxics. All new and proposed parking lots and developed areas in and adjacent to the preserve shall not drain directly into the preserve. All developed and paved areas and agricultural and recreational use areas shall prevent the release of toxins, chemicals, petroleum products, exotic plant materials, and other elements that might degrade or harm the natural environment or ecosystem processes within the preserve.

This will be accomplished using a variety of methods, including natural detention basins, grass swales, or mechanical trapping devices. These systems shall be maintained approximately once a year, or as often as needed to ensure proper functioning. Maintenance shall include dredging out sediments if needed, removing exotic plant materials, and adding chemical-neutralizing compounds (e.g., clay compounds when necessary and appropriate). Restaurants adjacent to the lagoon shall comply with storm drain regulations.

Drainage and Toxins Preventative Measures:

1. All developed and paved areas must prevent the release of toxins, chemicals, petroleum products, exotic plant materials and other elements that might degrade or harm the natural environment or ecosystem processes within the Preserve. This can be accomplished using a variety of methods including natural detention basins, grass swales or mechanical trapping devices. These systems should be maintained approximately once a year, or as often as needed, to ensure proper functioning. Maintenance should include dredging out sediments if needed, removing exotic plant materials, and adding chemical-neutralizing compounds (e.g., clay compounds) when necessary and appropriate.
2. Develop and implement urban runoff and drainage plans which will create the least impact practicable for all development adjacent to the Preserve. All development projects will be required to meet NPDES standards and incorporate BMP as defined by the City's Standard Urban Storm Mitigation Plan (SUSMP).

3. Pursuant to the San Diego Regional Water Quality Control Board Municipal Permit, and the City Storm Water Management Standards Requirements Manual, which includes the SUSMP, all development and redevelopment located within or directly adjacent to or discharging directly to an environmentally sensitive area (as defined in the Municipal Permit and the Local SUSMP) are required to implement site design, source control, and treatment control BMPs.

The BMPs shall, at a minimum include:

- Control post-development peak storm water runoff discharge rates and velocities to maintain or reduce pre-development downstream erosion and to protect stream habitat;
- Conserve natural areas where feasible;
- Minimize storm water pollutants of concern in runoff;
- Remove pollutants of concern from urban runoff;
- Minimize directly connected impervious areas where feasible;
- Protect slopes and channels from eroding;
- Include storm drain stenciling and signage;
- Include additional water quality provisions applicable to individual project categories;
- Ensure that post-development runoff does not contain pollutant loads which cause or contribute to an exceedance of water quality objectives or which have not been reduced to the maximum extent practicable; and,
- Implement BMPs close to pollutant sources.

4. Require all NPDES-regulated projects to implement a combination of BMP's as close to potential pollutant sources as feasible.

Proposed construction (SWPPP) and post-construction BMP's are required and proposed by the project.

As a result of the implemented Project specific construction BMP's, which shall be determined with the SWPPP when the grading permit is issued, and the distance of the Project footprint to the Preserve, specific additional measures, related to the adjacent Preserve, would not be warranted for the project.

Erosion and Sedimentation. All new development adjacent to preserve areas shall be required to adhere to measures outlined in the city's Grading, Erosion, and Sediment Control Ordinance to avoid degradation of lagoons, other wetland habitats, and upland habitats from erosion and sedimentation.

Erosion and Sedimentation Preventative Measures:

These measures include restrictions timing and amount of grading and vegetation removal. For example, grading or vegetation removal shall be prohibited during the rainy season (October 1 through April 15) without an approved erosion control plan and program in place. Grading or vegetation removal shall be prohibited adjacent to preserve areas during the rainy season unless determined to be allowable on a site-specific basis. In addition, all necessary erosion control devices must be in place, and appropriate monitoring and maintenance must be implemented during the grading period.

As a result of the implemented Project specific BMP's, which shall be determined with the SWPPP when the grading permit is issued, and the distance of the Project footprint to the Preserve, the project would not alter drainage patterns or induce erosion and sedimentation; instead, the Project shall maintain and improve the

existing storm drainage. Specific additional Erosion and Sedimentation Preventative measures, related to the adjacent Preserve, would not be warranted for the project.

Lighting. Lighting of all developed areas adjacent to the preserve shall be directed away from the preserve. Where necessary, development shall provide adequate shielding, berming, or other methods to protect the preserve and sensitive species from night lighting.

Lighting Preventative Measures:

Lighting of all developed areas adjacent to the Preserve shall be directed away from the Preserve wherever feasible and consistent with public safety. Where necessary, development shall provide adequate shielding with non-invasive plant materials (preferably native), berming, and/or other methods to protect the Preserve and sensitive species from night lighting. Consideration will be given to the use of low-pressure sodium lighting.

Specifically, prior to building permit issuance, building plans shall specify that that all outdoor lighting adjacent to the Open Space Lots (b and C) shall be shielded with full-cutoff light fixtures and directed away from adjacent open space easement. Building plans shall also state that if night work is necessary, night lighting shall be of the lowest illumination necessary for human safety, selectively placed, shielded and directed away from the lagoon and natural habitats.

As a result of the implemented Project specific lighting restrictions, and the distance of the Project footprint to the Preserve, specific additional measures, related to the adjacent Preserve, would not be warranted for the project.

Noise. Land uses adjacent to the preserve shall be designed to minimize noise impacts. Berms and walls shall be constructed adjacent to commercial areas, recreational areas, and any other use that may introduce noises that could impact or interfere with wildlife utilization of the preserve. Typically, any activities that generate noise levels greater than 60 decibels (A-weighted scale) within 500 feet of nesting sensitive bird species (such as California gnatcatcher, least Bell's vireo, southwestern willow flycatcher, California least tern, and snowy plover) shall be conducted outside of the breeding season or include sound attenuation devices. The ambient sound level onsite supporting the potential nesting habitat is typically above 60dB and is the likely reason no evidence of ongoing or historic nesting was observed during the surveys.

Noise Preventative Measures:

Due to the high level of ambient noise from the adjacent developed uses, including Manchester Avenue, both onsite and within the 500-foot radius, the noise associated with clearing, grading or grubbing will not negatively impact a potentially occupied nest.

No specific bird breeding season(s) restrictions shall be placed on temporary construction noise because of the existing high level of ambient noise as well as the buffer distance of the Project footprint to the Preserve, specific additional measures, related to the adjacent Preserve, would not be warranted for the project.

Barriers. The Proposed development adjacent to the preserve will provide barriers (e.g., noninvasive vegetation, rocks/boulders, fences, walls, and signs) along the preserve boundary and the proposed trail(s) to direct public access to appropriate entrance locations and reduce domestic animal predation.

Specifically, construction plans shall portray construction fencing to protect the wetlands adjacent to the proposed offsite CDFW jurisdictional wetland impacts within the Batiquitos Lagoon (on the south side of

Manchester Avenue) and limits of the proposed open space easement (onsite) to the satisfaction of the Development Services Department. The construction plans shall specify that construction fencing shall be installed and maintained for the entire duration of construction activity, and until permanent fencing is installed.

The following restrictions shall be included as part of the Homeowner Association (HOA) Covenants, Restrictions, and Conditions (CC&Rs) or other legally-enforceable HOA regulations.

These restrictions shall not be amended without prior approval by the City of Encinitas:

- Permanent fencing protecting access into the proposed open space easement shall be installed by the developer and maintained in perpetuity by the Bataquitos Lagoon Foundation.

As a result of the implemented Project specific barriers, and the distance of the developed Project footprint to the Preserve, specific additional measures, related to the adjacent Preserve, would not be warranted for the project.

Landscaping Restrictions. No invasive non-native plant species shall be introduced into areas immediately adjacent to the Preserve. When landscaping within or adjacent to the preserve, the following guidelines shall be followed:

- Prohibit the use of nonnative, invasive plant species (i.e., container stock and hydroseed material) in landscaping palettes.
- Revegetate areas of exotic species removal with native species appropriate to the adjacent preserve area.

Table 4-2, below, from Section 7 of the draft Encinitas Subarea plan provides a partial list of attractive native landscape plants that are tolerant of some summer irrigation and are compatible with adjacent preserve areas.

Table 4-2
NATIVE LANDSCAPING SHRUBS SUITABLE FOR USE
ADJACENT TO PRESERVE AREAS

Scientific Name	Common Name
<i>Adolphia californica</i>	California adolphia
<i>Atriplex lentiformis</i> ssp. <i>lentiformis</i>	Big saltbush
<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i>	Summer holly
<i>Encelia californica</i>	Coastal sunflower
<i>Heteromeles arbutifolia</i>	Toyon
<i>Malosma laurina</i>	Laurel sumac
<i>Mimulus auranticus</i>	Red monkeyflower
<i>Opuntia prolifera</i>	Cholla cactus
<i>Prunus ilicifolia</i> ssp. <i>ilicifolia</i>	Hollyleaf cherry
<i>Rhus integrifolia</i>	Lemonadeberry
<i>Rhus ovata</i>	Sugar bush
<i>Sambucus mexicana</i>	Mexican elderberry

See also Table 7-1 from Section 7 (attached; Attachment ‘H’) of the draft Encinitas Subarea plan for a list of landscape plants not recommended within 1,000 feet of preserve areas.

The Project was also designed to control and monitor horticultural regimes (e.g., irrigation, fertilization, pest control, and pruning), which can alter site conditions in natural areas, to prevent shifts in species

composition from native to nonnative flora. Irrigation runoff, for example, can alter natural areas that are adapted to xeric (dry) conditions, thereby promoting establishment of nonnative plants and displacement of native species. Irrigation can also carry pesticides into natural areas, adversely affecting both plants and wildlife. Irrigation shall be directed away from the preserve and fertilizer management programs shall be implemented that apply the minimal amount of fertilizer required for all public horticultural areas adjacent to the preserve.

Specifically, the following restrictions shall apply to the open space easement and shall be included as part of the Homeowner Association (HOA) Covenants, Restrictions, and Conditions (CC&Rs) or other legally-enforceable regulations. These restrictions shall not be amended without prior approval by the City of Encinitas:

- All landscaping within the project subdivision shall comply with the City's Invasive Plant Policy.
- Outside of the Preserved agricultural area (Figure 7), no invasive plant species shall be planted in or adjacent to the naturally vegetated areas open space easement, within the 100-foot buffer adjacent to the upland OS easement or within the temporary impacts associated with the improvements to the drainage outlets within the Batiquitos Lagoon. The Developer shall be responsible for any necessary removal of non-native invasive vegetation within the open space easement.
- Irrigation runoff shall be directed away from the open space easement and the Batiquitos Lagoon.

As a result of the implemented Project specific landscaping restrictions, and the distance of the Project footprint to the Preserve, specific additional measures, related to the adjacent Preserve, would not be warranted for the project.

Fire and Brush Management.

After review, the Fire Marshal is not requiring brush management for this Project. As a result of the distance of the Project footprint to the Preserve, specific additional measures, related to the adjacent Preserve, would not be warranted for the project.

6.4 Cumulative Impacts

The implementation of mitigation measures for direct/indirect impacts would avoid cumulatively considerable impacts. All native onsite habitat has been avoided and will be conserved. The permanent impact to the 0.08 acres of jurisdictional unvegetated, non-wetland, ephemeral waters and 12 sq. ft. of jurisdictional CDFW wetlands will be mitigated and no-net-loss of wetlands will be required along with the required additional agency permitting. All 777 sq. ft. of temporary impacts to the jurisdictional CDFW wetlands will be mitigated with the immediate restoration of the impacted areas (recontouring/seeding). As a result, the project will not have a cumulatively considerable or significant impact to biological resources.

7.0 LITERATURE CITED

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8.0 CERTIFICATION and AGENCY CONSULTATION

The following qualified Biologist completed the stated field survey(s) and preparation of this report:

Michael Jefferson – Senior Biologist, BLUE Consulting Group

The following Agency/staff have been consulted:

Batching Meeting (Jurisdictional Impacts): August 13, 2019 (latest meeting)

Led by CDFW staff Kelly Fisher Environmental Scientist; also attending were: EPA staff, additional CDFW staff, ACOE staff, RWQCB staff – Met 3 times for conceptual agreement of the Project as designed and mitigated

Nature Collective: Doug Gibson – Development team has consulted with Mr. Gibson on a regular basis to ensure that the Nature Collective is in support of the Project; including: OS, trails, jurisdictional impacts and mitigation requirements

CERTIFICATION: I hereby certify that the statements furnished above and in the attached exhibits present data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Signed:



Michael K. Jefferson
BLUE Consulting Group
Senior Biologist

Appendix A Plant Species Observed (Table 3)

TABLE 3
PLANT SPECIES OBSERVED

Scientific Name	Common Name	Habitat	Origin
<i>Acacia</i> ssp.	Acacia	DH, AG	I
<i>Amaranthus blitoides</i> S. Wats.	Pigweed, amaranth	DH, AG	I
<i>Artemisia californica</i>	California sagebrush	CSS	
<i>Brassica nigra</i> (L.) Koch.	Black mustard	DH, AG	I
<i>Bromus hordeaceus</i> L.	Smooth brome	DH	I
<i>Bromus madritensis</i> L. ssp. <i>rubens</i> (L.) Husnot	Foxtail chess	DH	I
<i>Centaurea melitensis</i> L.	Tocolote, star-thistle	DH	I
<i>Cuscuta salina</i>	Salty dodder	FWM	I
<i>Distichlis spicata</i>	Saltgrass	FWM	N
<i>Eriogonum fasciculatum</i>	California buckwheat	CSS	N
<i>Erodium cicutarium</i> (L.) L. Her.	White-stemmed filaree	DH	I
<i>Eucalyptus</i> sp.	Eucalyptus sp.	DH	I
<i>Frankenia grandifolia</i>	Alkali heath	FWM	N
<i>Foeniculum vulgare</i> Mill.	Fennel	DH	I
<i>Heteromeles arbutifolia</i>	Toyon	CSS	N
<i>Juncus acutus</i>	Spiny Rush	FWM	N
<i>Malosma laurina</i> (Nutt.) Abrams	Laurel sumac	AG	N
<i>Medicago polymorpha</i> L.	California bur clover	DH, AG	I
<i>Melilotus alba</i>	White sweet clover	DH, AG	I
<i>Nicotiana glauca</i> Grah.	Tree tobacco	DH, AG	I
<i>Rhus integrifolia</i> (Nutt.) Brewer & Watson	Lemonadeberry	DH	N
<i>Salicornia virginica</i>	Pickleweed	FWM	N
<i>Salsola tragus</i> L.	Russian thistle, tumbleweed	DH, AG	I
<i>Salvia</i> spp.	Sages	CSS	N
<i>Schinus terebinthifolius</i> Raddi	Brazilian pepper tree	DH, AG	I
<i>Tamarisk</i> Sp.	Salt Cedar	DH, AG	I
<i>Urtica urens</i> L.	Dwarf nettle	DH, AG	I
<i>Vulpia myuros</i> (L.) var. <i>hirsuta</i> (Hackel.) Asch. & Graebr.	Rattail fescue	DH, AG	I
<i>Xanthium strumarium</i> L.	Cocklebur	DH, AG	N

HABITATS OTHER TERMS

DH = Disturbed/Ruderal habitat
AG = Agricultural
FWM = Freshwater Marsh
CSS = Coastal sage scrub

N = Native to locality
I = Introduced species from outside locality

Appendix B Wildlife Species Observed (Table 4)

TABLE 4
WILDLIFE SPECIES OBSERVED/DETECTED ONSITE

Common Name	Scientific Name	Occupied Habitat	Status	Evidence of Occurrence
<u>Invertebrates</u> (Nomenclature from Brown, Real, and Faulkner 1992)				
Cabbage white	<i>Pieris rapae</i>	DIS		O
<u>Amphibians</u> (Nomenclature from Collins 1997)				
N/A				
<u>Reptiles</u> (Nomenclature from Collins 1997)				
Western fence lizard	<i>Sceloporus occidentalis</i>	DIS		O
<u>Birds</u> (Nomenclature from American Ornithologists' Union)				
Mourning dove	<i>Zenaida macroura marginella</i>	all		O
Western scrub-jay	<i>Aphelocoma californica</i>	all		O
Common raven	<i>Corvus corax clarionensis</i>	all		O
House finch	<i>Carpodacus mexicanus frontalis</i>	all		O
Turkey vulture	<i>Cathartes aura</i>	all		O
Lesser goldfinch	<i>Carduelis psaltria hesperophilus</i>	all		O
<u>Mammals</u> (Nomenclature from Jones et al. 1982)				
N/A				
<div> <div> <u>Habitats</u> DEV = Developed DIS = Disturbed/Agriculture </div> <div> <u>Status</u> CSC = California Department of Fish and Game species of special concern FT = Listed as threatened by the federal government </div> </div>				

Appendix C Sensitive Plant Species with the Potential to Occur

**SENSITIVE PLANT SPECIES
OBSERVED (†) OR WITH THE POTENTIAL FOR OCCURRENCE**

Species	State/Federal Status	City Status	CNPS List/Code	Typical Habitat/Comments
<i>Acanthomintha ilicifolia</i> San Diego thornmint	CE/FT	NE, MHCP	1B/2-3-2	Chaparral, coastal sage scrub, valley and foothill grassland/ clay soils. No appropriate habitat, not expected to occur
<i>Ambrosia pumila</i> San Diego ambrosia	—/—	NE, MHCP	1B/3-2-2	Creekbeds, seasonally dry drainages, floodplains. No suitable habitat. no potential to occur.
<i>Arctostaphylos glandulosa</i> ssp. <i>crassifolia</i> Del Mar manzanita	—/FE	MHCP	1B/3-3-2	Southern maritime chaparral. No appropriate habitat, not expected to occur
<i>Artemisia palmeri</i> San Diego sagewort	—/—	—	2/2-2-1	Coastal sage scrub, chaparral, riparian. No appropriate habitat, not expected to occur
<i>Baccharis vanessae</i> Encinitas coyote bush	CE/FT	NE, MHCP	1B/2-3-3	Chaparral. No appropriate habitat, not expected to occur
<i>Brodiaea filifolia</i> Thread-leaved brodiaea	CE/FT	MHCP	1B/3-3-3	Valley and foothill grassland, vernal pools. No appropriate habitat, not expected to occur
<i>Brodiaea orcuttii</i> Orcutt's brodiaea	—/—	MHCP	1B/1-3-2	Closed-cone coniferous forest, meadows, cismontane woodland, valley and foothill grassland, vernal pools. No appropriate habitat, not expected to occur
<i>Chorizanthe polygonoides</i> var. <i>longispina</i> Long-spined spineflower	—/—	—	1B/2-2-2	Open chaparral, coastal sage scrub, montane meadows, valley and foothill grasslands; vernal pools/clay. No appropriate habitat, not expected to occur
<i>Dichondra occidentalis</i> Western dichondra	—/—	—	4/1-2-1	Chaparral, cismontane woodland, coastal sage scrub, valley and foothill grassland/generally post-burn. No appropriate habitat, not expected to occur

**SENSITIVE PLANT SPECIES
OBSERVED (†) OR WITH THE POTENTIAL FOR OCCURRENCE
(continued)**

Species	State/Federal Status	City Status	CNPS List/Code	Typical Habitat/Comments
<i>Ferocactus viridescens</i> Coast barrel cactus	—/—	MHCP	2/1-3-1	Chaparral, coastal sage scrub, valley and foothill grassland. Not observed, moderate potential to occur
<i>Harpagonella palmeri</i> var. <i>palmeri</i> Palmer's grappling hook	—/—	—	2/1-2-1	Chaparral, coastal sage scrub, valley and foothill grassland. No appropriate habitat, not expected to occur
<i>Juncus acutus</i> ssp. <i>leopoldii</i> Spiny rush	—/—	—	4/1-2-1	Coastal dunes (mesic) meadows (alkaline), coastal salt marsh. No appropriate habitat, not expected to occur
<i>Lessingia filaginifolia</i> var. <i>filaginifolia</i> (= <i>Corethrogyne filaginifolia</i> var. <i>incana</i>) San Diego sand aster	—/—	—	1B/2-2-2	Coastal sage scrub, chaparral. No appropriate habitat, not expected to occur
<i>Muilla clevelandii</i> San Diego goldenstar	—/—	MHCP	1B/2-2-2	Chaparral, coastal sage scrub, valley and foothill grassland, vernal pools. No appropriate habitat, not expected to occur
<i>Quercus dumosa</i> Nuttall's scrub oak	—/—	—	1B/2-3-2	Coastal chaparral. No appropriate habitat, not expected to occur
<i>Tetracoccus dioicus</i> Parry's tetracoccus	—/—	MHCP	1B/3-2-2	Chaparral, coastal sage scrub. No appropriate habitat, not expected to occur

NOTE: See Appendix E for explanation of sensitivity codes.

Appendix D Sensitive Wildlife Species with the Potential to Occur

**SENSITIVE WILDLIFE SPECIES
OBSERVED (∞) OR WITH THE POTENTIAL FOR OCCURRENCE**

Species	Status	Habitat	Occurrence/Comments*
<u>Invertebrates</u> (Nomenclature from Collins 1997)			
Quino checkerspot butterfly <i>Euphydryas editha quino</i>	CSC, MHCP	Chaparral, coastal sage scrub with coarse sandy soils and scattered brush and <i>plantago</i> sp.	Outside of USFWS potential habitat area. No potential to occur onsite.
Monarch <i>Danaus plexippus</i>	CSC, MHCP	Open fields and meadows with milkweed.	Appropriate habitat. Moderate potential to occur onsite.
<u>Reptiles</u> (Nomenclature from Collins 1997)			
Southwestern pond turtle <i>Clemmys marmorata pallida</i>	CSC, FSS, MHCP	Ponds, small lakes, marshes, slow-moving, sometimes brackish water.	No appropriate habitat. No potential to occur onsite.
San Diego horned lizard <i>Phrynosoma coronatum blainvillii</i>	CSC, MHCP, *	Chaparral, coastal sage scrub with fine, loose soil. Partially dependent on harvester ants for forage.	Appropriate habitat. Moderate potential to occur onsite.
Coastal rosy boa <i>Charina trivirgata roseofusca</i>	CSC, MHCP	Chaparral, coastal sage scrub with coarse sandy soils and scattered brush.	Appropriate habitat. Moderate potential to occur onsite.
San Diego banded gecko <i>Coleonyx variegates abbottii</i>	CSC, MHCP	Rocky areas in coastal sage and chaparral.	No appropriate habitat. No potential to occur onsite.
Coastal whiptail <i>Cnemidophorus tigris stejnegeri</i>	CSC, MHCP	Chaparral, coastal sage scrub with coarse sandy soils and scattered brush.	No appropriate habitat. No potential to occur onsite.
Belding's orangethroat whiptail <i>Cnemidophorus hyperythrus beldingi</i>	CSC, MHCP	Chaparral, coastal sage scrub with coarse sandy soils and scattered brush.	Appropriate habitat. Moderate potential to occur onsite.
Silvery legless lizard <i>Anniella pulchra pulchra</i>	CSC	Herbaceous layers with loose soil in coastal scrub, chaparral, and open riparian habitats. Prefers dunes and sandy washes near moist soil.	Low potential to occur onsite due to habitat. Not historically observed in the area, not expected to occur.

**SENSITIVE WILDLIFE SPECIES
OBSERVED (∞) OR WITH THE POTENTIAL FOR OCCURRENCE
(continued)**

Species	Status	Habitat	Occurrence/Comments*
Red diamond rattlesnake <i>Crotalus exsul</i> (<i>C. ruber ruber</i>)	CSC	Desert scrub and riparian habitats, coastal sage scrub, open chaparral, grassland, and agricultural fields.	Appropriate habitat. Moderate potential to occur onsite.
San Diego ring neck snake <i>Diadophis punctatus similis</i>	CSC	Moist habitats, including wet meadows, rocky hillsides, gardens, farmland, grassland, chaparral, mixed coniferous forests, woodlands.	No appropriate habitat. No potential to occur onsite.
Coast patch-nosed snake <i>Salvadora hexalepis virgultea</i>	CSC	Grasslands, chaparral, sagebrush, desert scrub. Found in sandy and rocky areas.	Low potential to occur onsite due to habitat. Not historically observed in the area.
<u>Birds</u> (Nomenclature from American Ornithologists' Union)			
Great blue heron (rookery site) <i>Ardea herodias</i>	*	Bays, lagoons, ponds, lakes. Non-breeding year-round visitor, some localized breeding.	No appropriate habitat. No potential to occur onsite.
Great egret (rookery site) <i>Ardea alba</i>	*	Lagoons, bays, estuaries. Ponds and lakes in the coastal lowland. Winter visitor, uncommon in summer.	No appropriate habitat. No potential to occur onsite.
White-tailed kite (nesting) <i>Elanus leucurus</i>	CFP, *	Nest in riparian woodland, oaks, sycamores. Forage in open, grassy areas. Year-round resident.	No appropriate habitat. No potential to occur onsite.
Northern harrier (nesting) <i>Circus cyaneus</i>	CSC, MHCP	Coastal lowland, marshes, grassland, agricultural fields. Migrant and winter resident, rare summer resident.	No appropriate habitat. No potential to occur onsite.
Sharp-shinned hawk (nesting) <i>Accipiter striatus</i>	CSC	Open deciduous woodlands, forests, edges, parks, residential areas. Migrant and winter visitor.	No appropriate habitat. No potential to occur onsite.

**SENSITIVE WILDLIFE SPECIES
OBSERVED (∞) OR WITH THE POTENTIAL FOR OCCURRENCE
(continued)**

Species	Status	Habitat	Occurrence/Comments*
Cooper's hawk (nesting) <i>Accipiter cooperii</i>	CSC, MHCP	Mature forest, open woodlands, wood edges, river groves. Parks and residential areas. Migrant and winter visitor.	No appropriate habitat. No potential to occur onsite.
Ferruginous hawk (wintering) <i>Buteo regalis</i>	CSC	Require large foraging areas. Grasslands, agricultural fields. Uncommon winter resident.	No appropriate habitat. No potential to occur onsite.
Golden eagle (nesting and wintering) <i>Aquila chrysaetos</i>	CSC, CFP, BEPA, MHCP	Require vast foraging areas in grassland, broken chaparral, or sage scrub. Nest in cliffs and boulders. Uncommon resident.	No appropriate habitat. No potential to occur onsite.
Merlin <i>Falco columbarius</i>	CSC	Rare winter visitor. Grasslands, agricultural fields, occasionally mud flats.	No appropriate habitat. No potential to occur onsite.
Prairie falcon (nesting) <i>Falco mexicanus</i>	CSC	Grassland, agricultural fields, desert scrub. Uncommon winter resident. Rare breeding resident. Breeds on cliffs.	Low potential to occur onsite.
Western yellow-billed cuckoo (breeding) <i>Coccyzus americanus occidentalis</i>	SE	Large riparian woodlands. Summer resident. Very localized breeding.	Low potential to occur onsite.
Western burrowing owl (burrow sites) <i>Speotyto cunicularia hypugaea</i>	CSC, MHCP	Grassland, agricultural land, coastal dunes. Require rodent burrows. Declining resident.	Low potential to occur onsite.
Southwestern willow flycatcher <i>Empidonax traillii extimus</i>	SE, FE, FSS, MHCP	Nesting restricted to willow thickets. Also occupies other woodlands. Rare spring and fall migrant, rare summer resident. Extremely localized breeding.	No appropriate habitat. No potential to occur onsite.
Turkey Vulture (∞) <i>Cathartes aura</i>	CSC, MHCP	Grassland, agricultural land, coastal sage, chaparral. Declining resident.	Observed flying overhead. Limited potential nesting onsite

**SENSITIVE WILDLIFE SPECIES
OBSERVED (∞) OR WITH THE POTENTIAL FOR OCCURRENCE
(continued)**

Species	Status	Habitat	Occurrence/Comments*
California horned lark <i>Eremophila alpestris actia</i>	CSC	Sandy shores, mesas, disturbed areas, grasslands, agricultural lands, sparse creosote bush scrub.	Low potential to occur onsite.
Coastal cactus wren <i>Campylorhynchus brunneicapillus couesi</i>	CSC, MHCP, *	Maritime succulent scrub, coastal sage scrub with <i>Opuntia</i> thickets. Rare localized resident.	Appropriate habitat. Moderate potential to occur onsite.
Coastal California gnatcatcher <i>Polioptila californica californica</i>	FT, CSC, MHCP	Coastal sage scrub, maritime succulent scrub. Resident.	Appropriate habitat. High potential to occur onsite.
Loggerhead shrike <i>Lanius ludovicianus</i>	CSC	Open foraging areas near scattered bushes and low trees.	Appropriate habitat. Moderate potential to occur onsite.
Least Bell's vireo (nesting) <i>Vireo bellii pusillus</i>	SE, FE, MHCP	Willow riparian woodlands. Summer resident.	Low potential to occur onsite.
Yellow warbler (nesting) <i>Dendroica petechia brewsteri</i>	CSC	Breeding restricted to riparian woodland. Spring and fall migrant, localized summer resident, rare winter visitor.	No appropriate habitat. No potential to occur onsite.
Yellow-breasted chat (nesting) <i>Icteria virens</i>	CSC, MHCP	Dense riparian woodland. Localized summer resident.	No appropriate habitat. No potential to occur onsite.
Southern California rufous-crowned sparrow <i>Aimophila ruficeps canescens</i>	CSC, MHCP	Coastal sage scrub, grassland. Resident.	Appropriate habitat. Moderate potential to occur onsite.
Bell's sage sparrow <i>Amphispiza belli belli</i>	CSC, MHCP	Chaparral, coastal sage scrub. Localized resident.	Appropriate habitat. Moderate potential to occur onsite.
Tricolored blackbird <i>Agelaius tricolor</i>	CSC, MHCP	Freshwater marshes, agricultural areas, lakeshores, parks. Localized resident.	Appropriate habitat. Moderate potential to occur onsite.
Blue grosbeak (nesting) <i>Guiraca caerulea</i>	*	Riparian woodland edges, mule fat thickets. Summer resident, spring and fall migrant, winter visitor.	Low potential to occur onsite.

**SENSITIVE WILDLIFE SPECIES
OBSERVED (∞) OR WITH THE POTENTIAL FOR OCCURRENCE
(continued)**

Species	Status	Habitat	Occurrence/Comments*
<u>Mammals</u> (Nomenclature from Jones et al. 1982)			
Pallid bat <i>Antrozous pallidus</i>	CSC	Caves, mines, buildings. Found in a variety of habitats, arid and mesic.	Low potential to occur onsite. Low to moderate potential to occur onsite due to habitat. Not historically observed in the area.
Ringtail cat <i>Bassariscus astutus</i>	CSC	Desert dune, rock outcrops, chaparral, forest (scrub) and mountains.	Low potential to occur onsite.
Pale big-eared bat <i>Corynorhinus townsendii pallescens</i>	CSC	Caves, mines, buildings. Found in a variety of habitats, arid and mesic.	Low to moderate potential to occur onsite due to habitat. Not historically observed in the area.
Townsend's western big-eared bat <i>Corynorhinus townsendii townsendii</i>	CSC, MHCP	Caves, mines, buildings. Found in a variety of habitats, arid and mesic.	Low to moderate potential to occur onsite due to habitat. Not historically observed in the area.
Californai leaf nosed bat <i>Macrotus californicus</i>	CSC, MHCP	Woodlands, rocky habitat, arid and semiarid lowlands, cliffs, crevices, buildings, tree hollows.	Low to moderate potential to occur onsite due to habitat. Not historically observed in the area.
Western mastiff bat <i>Eumops perotis californicus</i>	CSC, MHCP	Woodlands, rocky habitat, arid and semiarid lowlands, cliffs, crevices, buildings, tree hollows.	Low to moderate potential to occur onsite due to habitat. Not historically observed in the area.
Western small-footed myotis <i>Myotis ciliolabrum</i>	CSC, MHCP	Woodlands, rocky habitat, arid and semiarid lowlands, cliffs, crevices, buildings, tree hollows.	Low to moderate potential to occur onsite due to habitat. Not historically observed in the area.
Long-eared myotis <i>Myotis evotis</i>	CSC, MHCP	Woodlands, rocky habitat, arid and semiarid lowlands, cliffs, crevices, buildings, tree hollows.	Low to moderate potential to occur onsite due to habitat. Not historically observed in the area.
Yuma myotis <i>Myotis yumanensis</i>	CSC, MHCP	Woodlands, rocky habitat, arid and semiarid lowlands, cliffs, crevices, buildings, tree hollows.	Low to moderate potential to occur onsite due to habitat. Not historically observed in the area.

**SENSITIVE WILDLIFE SPECIES
OBSERVED (∞) OR WITH THE POTENTIAL FOR OCCURRENCE
(continued)**

Species	Status	Habitat	Occurrence/Comments*
Friged myotis <i>Eumops perotis californicus</i>	CSC, MHCP	Woodlands, rocky habitat, arid and semiarid lowlands, cliffs, crevices, buildings, tree hollows.	Low to moderate potential to occur onsite due to habitat. Not historically observed in the area.
Long legged myotis <i>Myotis volans</i>	CSC, MHCP	Woodlands, rocky habitat, arid and semiarid lowlands, cliffs, crevices, buildings, tree hollows.	Low to moderate potential to occur onsite due to habitat. Not historically observed in the area.
Big free-tailed bat <i>Nyctinomops macrotis</i>	CSC, MHCP	Woodlands, rocky habitat, arid and semiarid lowlands, cliffs, crevices, buildings, tree hollows.	Low to moderate potential to occur onsite due to habitat. Not historically observed in the area.
Pocketed free-tailed bat <i>Nyctinomops femorosacca</i>	CSC, MHCP	Woodlands, rocky habitat, arid and semiarid lowlands, cliffs, crevices, buildings, tree hollows.	Low to moderate potential to occur onsite due to habitat. Not historically observed in the area.
Californai leaf nosed bat <i>Macrotus californicus</i>	CSC, MHCP	Woodlands, rocky habitat, arid and semiarid lowlands, cliffs, crevices, buildings, tree hollows.	Low to moderate potential to occur onsite due to habitat. Not historically observed in the area.
Mountain lion <i>Felis concolor</i>	CSC, MHCP	Grassland, agricultural land, coastal sage, chaparral. Declining resident.	Low to moderate potential to occur onsite due to habitat. Not historically observed in the area.
Southern Mule Deer <i>Odocoileus hemionus</i>	CSC, MHCP	Grassland, agricultural land, coastal sage, chaparral. Declining resident.	Low to moderate potential to occur onsite due to habitat. Not historically observed in the area.
San Diego black-tailed jackrabbit <i>Lepus californicus bennettii</i>	CSC, MHCP	Open areas of scrub, grasslands, agricultural fields.	Low to moderate potential to occur onsite due to habitat. Not historically observed in the area.
Dulzura California pocket mouse <i>Chaetodipus californicus femoralis</i>	CSC, MHCP	San Diego County west of mountains in sparse, disturbed coastal sage scrub or grasslands with sandy soils.	No appropriate habitat, out of range, no potential to occur onsite.
Northwestern San Diego pocket mouse <i>Chaetodipus fallax fallax</i>	CSC, MHCP	San Diego County west of mountains in sparse, disturbed coastal sage scrub or grasslands with sandy soils.	No appropriate habitat, out of range, no potential to occur onsite.

**SENSITIVE WILDLIFE SPECIES
OBSERVED (∞) OR WITH THE POTENTIAL FOR OCCURRENCE
(continued)**

Species	Status	Habitat	Occurrence/Comments*
Stephen's kangaroo rat <i>Dipodomys stephensi</i>	CSC, MHCP	Sparse perennial plant cover is preferred (Thomas 1975). Burrows may be excavated in firm soil that is "neither extremely hard nor sandy" (Lackey 1967a)	No appropriate habitat, out of range, no potential to occur onsite.
San Diego desert woodrat <i>Neotoma lepida intermedia</i>	CSC	Coastal sage scrub and chaparral.	Low potential to occur onsite.
Southern grasshopper mouse <i>Onychomys torridus ramona</i>	FE, CSC, MHCP	Grasslands and sparse coastal sage scrub.	No appropriate habitat, out of range, no potential to occur onsite.
Los Angeles little pocket mouse <i>Perognathus longimembris brevinasus</i>	FE, CSC, MHCP	Fine, sandy soils, typically in arid grassland or coastal sage scrub habitats.	No appropriate habitat, out of range, no potential to occur onsite.
Pacific little pocket mouse <i>Perognathus longimembris pacificus</i>	FE, CSC, MHCP	Open coastal sage scrub; fine, alluvial sands near ocean.	No appropriate habitat, out of range, no potential to occur onsite.
American badger <i>Taxidea taxus</i>	MHCP	Dry, open grasslands, fields, and pastures.	No appropriate habitat, no potential to occur onsite.

Status Codes

Listed/Proposed

FE = Listed as endangered by the federal government
 FT = Listed as threatened by the federal government
 SE = Listed as endangered by the state of California

Other

BEPA = Bald and Golden Eagle Protection Act
 CFP = California fully protected species
 CSC = California Department of Fish and Game species of special concern
 FC = Federal candidate for listing (taxa for which the U.S. Fish and Wildlife Service has on file sufficient information on biological vulnerability and threat(s) to support proposals to list as endangered or threatened; development and publication of proposed rules for these taxa are anticipated)
 FSS = Federal (Bureau of Land Management and U.S. Forest Service) sensitive species
 MHCP = Multiple Habitat Conservation Program target species list

**SENSITIVE WILDLIFE SPECIES
OBSERVED (∞) OR WITH THE POTENTIAL FOR OCCURRENCE
(continued)**

- * = Taxa listed with an asterisk fall into one or more of the following categories:
- Taxa considered endangered or rare under Section 15380(d) of CEQA guidelines
 - Taxa that are biologically rare, very restricted in distribution, or declining throughout their range
 - Population(s) in California that may be peripheral to the major portion of a taxon's range, but which are threatened with extirpation within California
 - Taxa closely associated with a habitat that is declining in California at an alarming rate (e.g., wetlands, riparian, old growth forests, desert aquatic systems, native grasslands)

Appendix E Sensitivity Codes

**APPENDIX E
SENSITIVITY CODES**

FEDERAL CANDIDATES AND LISTED PLANTS

FE	=	Federally listed, endangered
FT	=	Federally listed, threatened
FPE	=	Federally proposed endangered
FPT	=	Federally proposed threatened

STATE LISTED PLANTS

CE	=	State listed, endangered
CR	=	State listed, rare
CT	=	State listed, threatened

CITY MHCP STATUS

NE	=	Narrow endemic species
CS	=	MHCP Covered Species List

CALIFORNIA NATIVE PLANT SOCIETY

LISTS

1A	=	Species presumed extinct.
1B	=	Species rare, threatened, or endangered in California and elsewhere. These species are eligible for state listing.
2	=	Species rare, threatened, or endangered in California but which are more common elsewhere. These species are eligible for state listing.
3	=	Species for which more information is needed. Distribution, endangerment, and/or taxonomic information is needed.
4	=	A watch list of species of limited distribution. These species need to be monitored for changes in the status of their populations.

R-E-D CODES

R (Rarity)

1	=	Rare, but found in sufficient numbers and distributed widely enough that the potential for extinction is low at this time.
2	=	Occurrence confined to several populations or to one extended population.
3	=	Occurrence limited to one or a few highly restricted populations, or present in such small numbers that it is seldom reported.

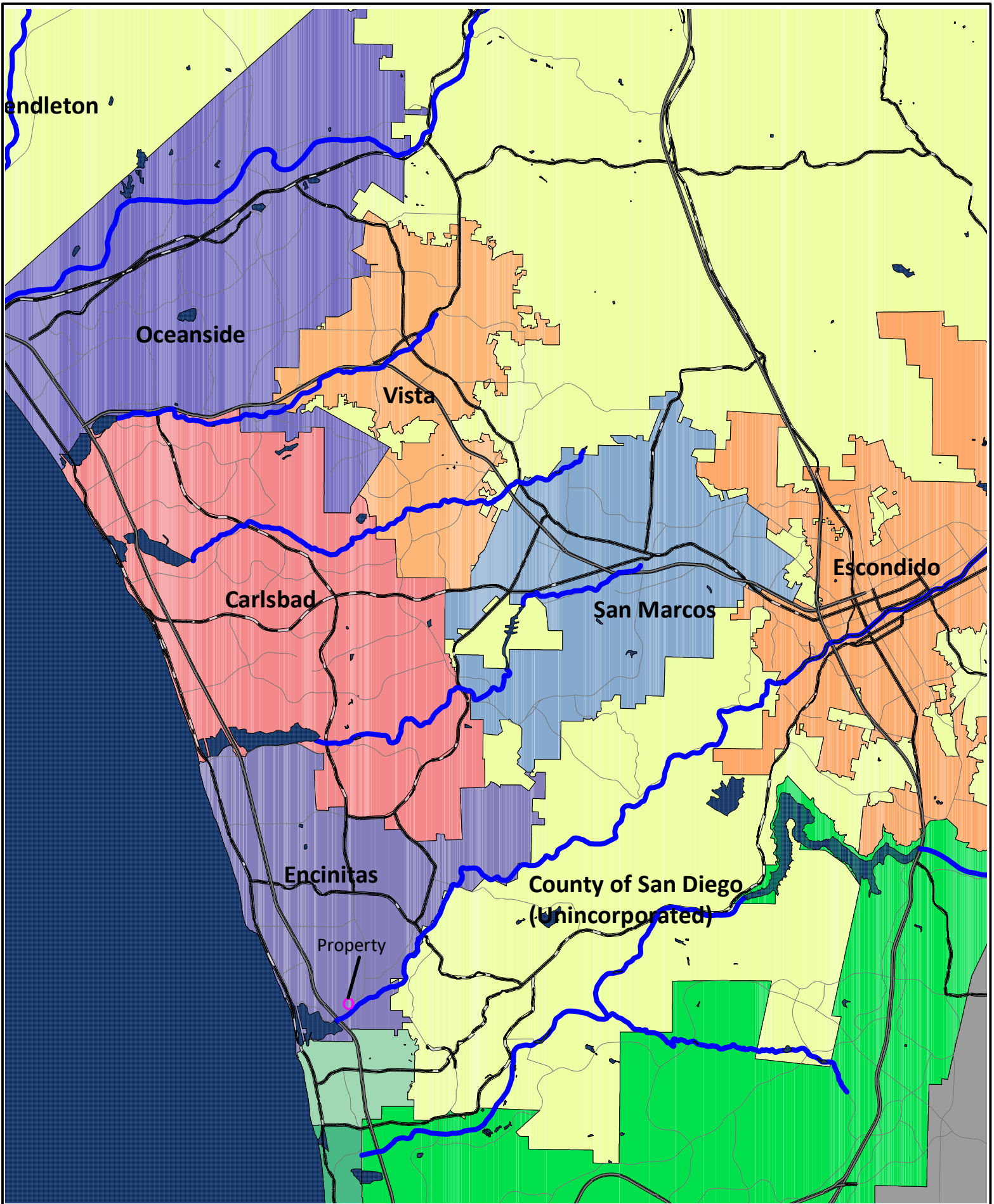
E (Endangerment)

1	=	Not endangered
2	=	Endangered in a portion of its range
3	=	Endangered throughout its range

D (Distribution)

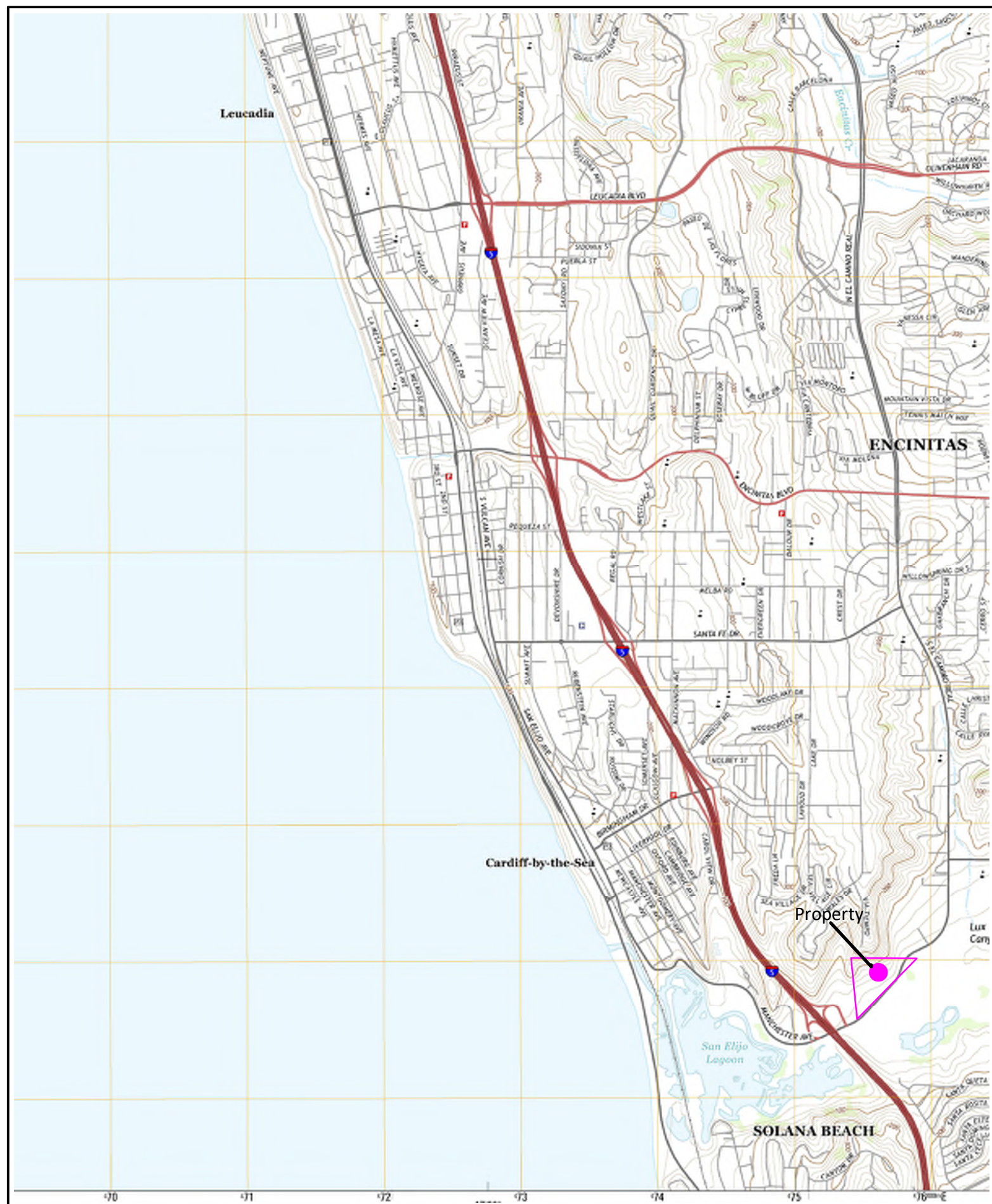
1	=	More or less widespread outside California
2	=	Rare outside California
3	=	Endemic to California

Appendix F Figures 1-7



○ Encinitas 45 Property

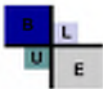
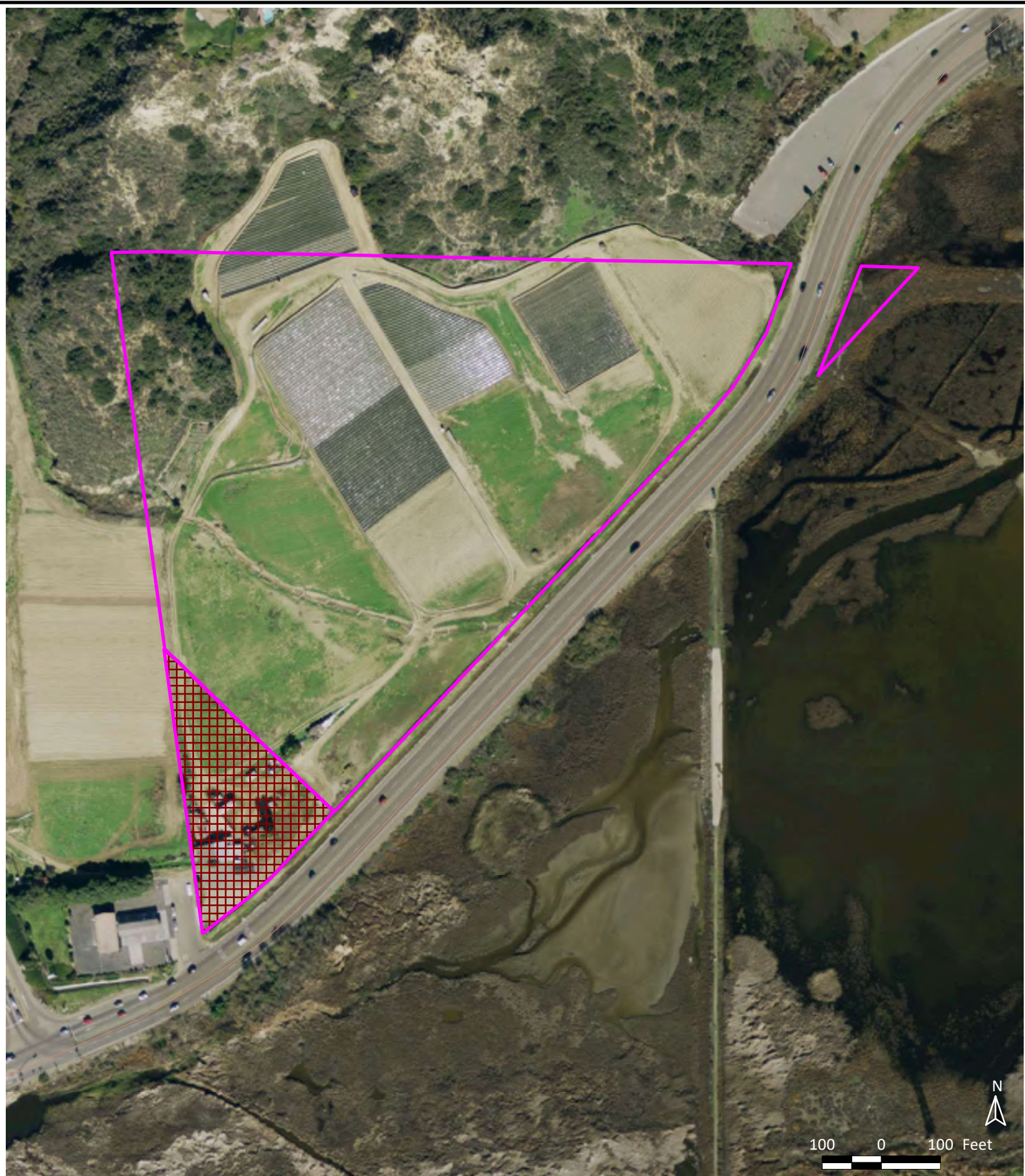
FIGURE 1
Regional Project
Location



Property

FIGURE 2

USGS Topo Project
Location

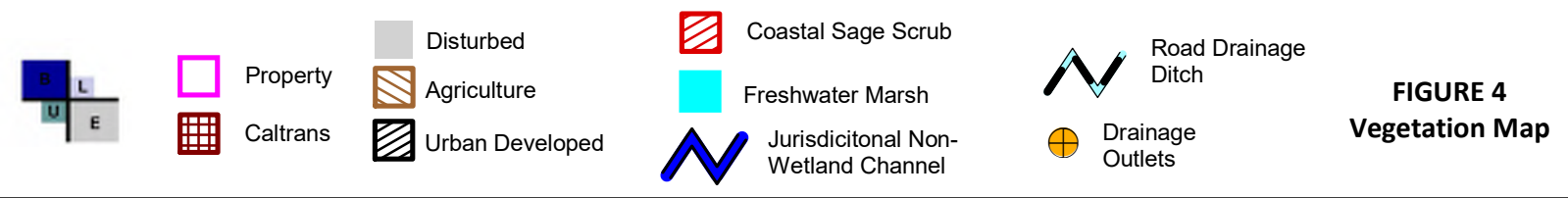
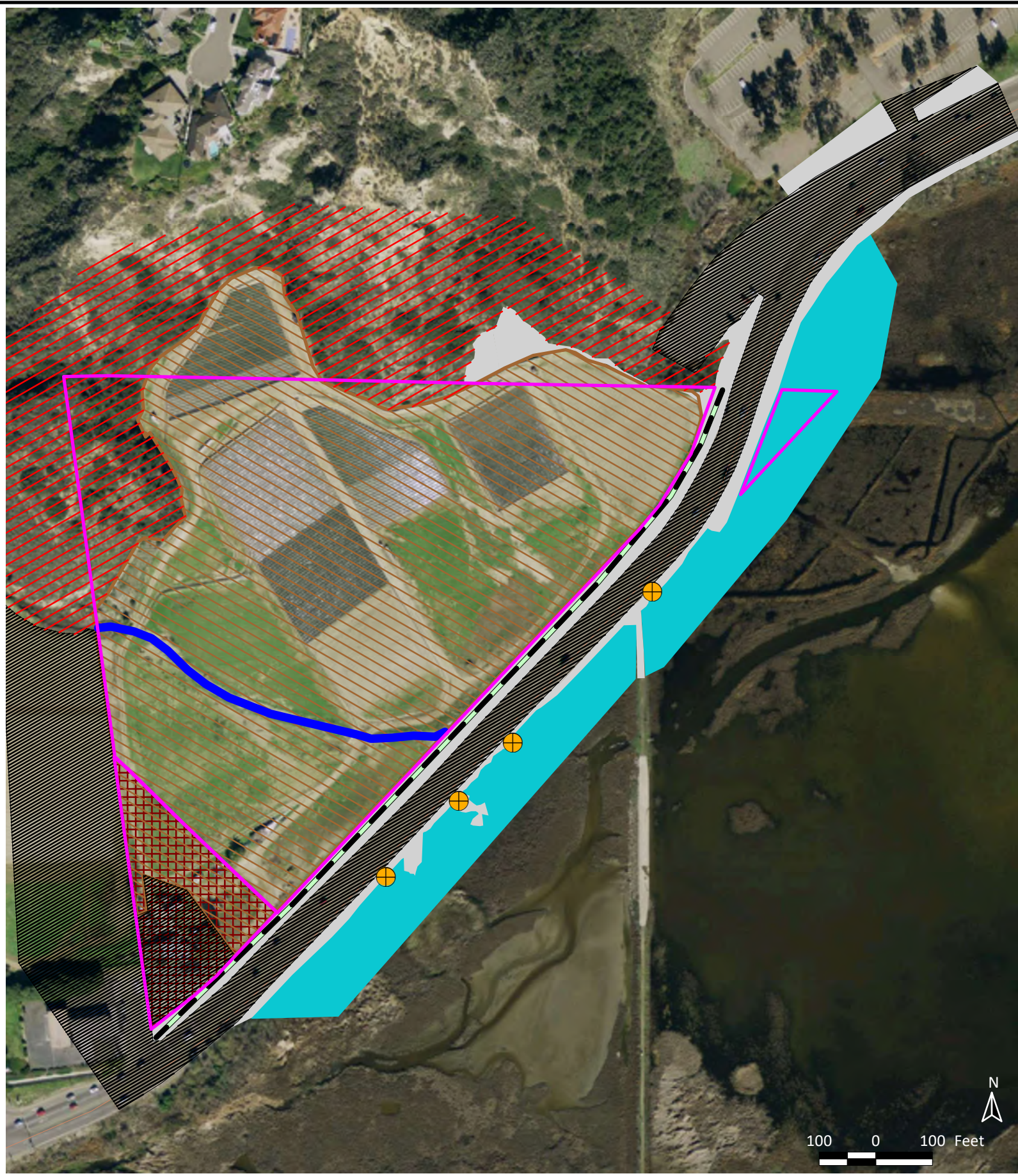


Property



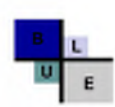
Caltrans - Eminent domain; Park N Ride

FIGURE 3
Property Aerial



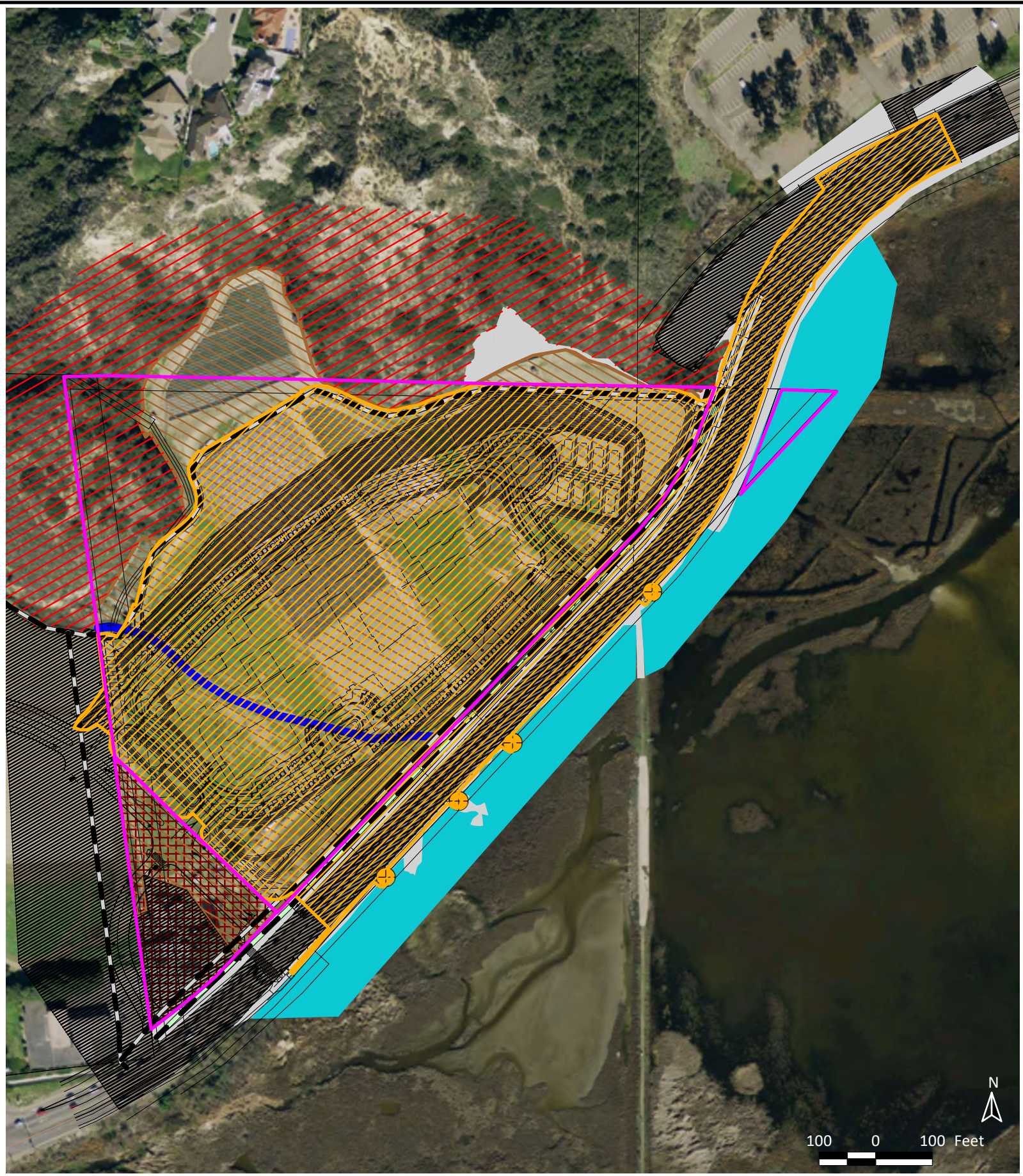


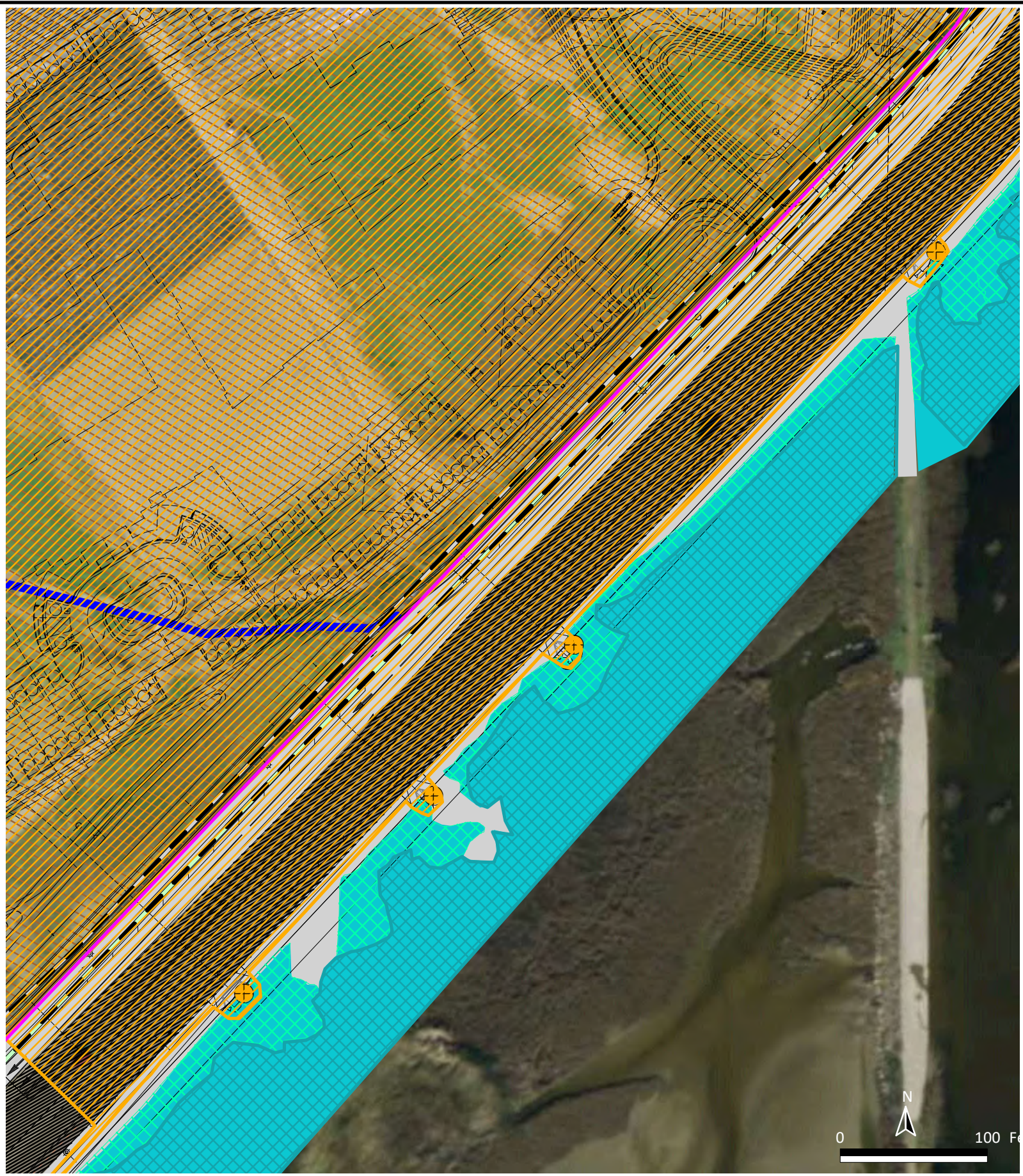
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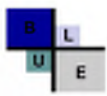


- | | | | |
|------------------|-------------|---------------------------------------|--------------------|
| Property | Disturbed | Road Drainage Ditch (no jurisdiction) | Freshwater Marsh |
| Caltrans | Agriculture | ACOE/CDFW Non-Wetland Channel | CDFW Wetlands |
| Drainage Outlets | Developed | | ACOE/CDFW wetlands |
| | CSS | | |

FIGURE 5
Jurisdictional
Delineation Map







Property

Caltrans

Grading Footprint

Drainage Outlets

ACOE/CDFW Non-Wetland Channel

Road Drainage Ditch (no jurisdiction)

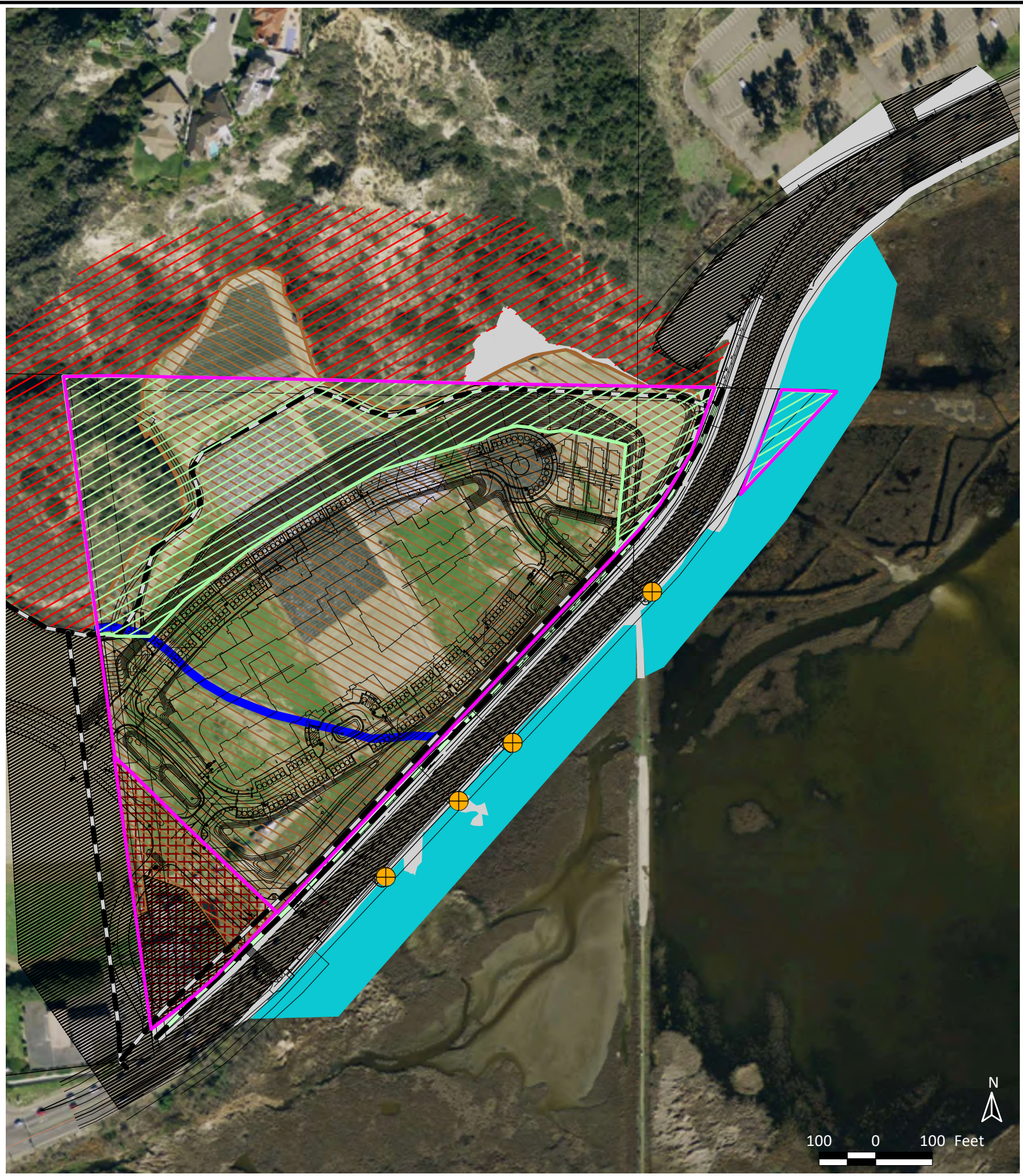
ACOE/CDFW Non-Wetland Channel

Marsh Habitat

ACOE/CDFW Wetlands

CDFW Wetlands

FIGURE 6a
Project Impact
Map
(Drainage Improvements)








- | | | |
|--|--|---|
|  Property |  Freshwater Marsh |  Open Space |
|  Caltrans |  Coastal Sage Scrub | |

FIGURE 7
Preserved Habitat
OS Map

Appendix G RECON offsite Wetland Delineation



**Jurisdictional Waters/
Wetland Delineation Report for the
Encinitas Senior Housing Project,
Encinitas, California**

Prepared for

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Prepared by

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RECON Number 9525

August 21, 2019

A handwritten signature in black ink, appearing to read "A. Smisek", is positioned above the name of the biologist.

Andrew Smisek, Biologist

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Acronyms and Abbreviations

CDFW	California Department Fish and Wildlife
FAC	Facultative
FACU	Facultative-Upland
FACW	Facultative-Wetland
NI	No Indicator
OBL	Obligate
OHWM	Ordinary High Water Mark
project	Encinitas Senior Housing Project
RWQCB	Regional Water Quality Control Board
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USGS	U.S. Geological Survey

Summary of Findings

RECON Environmental, Inc. conducted a routine jurisdictional waters/wetland delineation in the 2.73-acre Encinitas Senior Housing Project (project) off-site survey areas on August 6, 2019. The methods for delineating wetlands adhered to the guidelines set forth by the U.S. Army Corps of Engineers (USACE) in the 1987 *Corps of Engineers Wetlands Delineation Manual* (USACE 1987), the 2008 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008), and *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (Lichvar and McColley 2008).

A total of 0.021 acre and 142 linear feet of non-wetland waters of the U.S., and a total of 0.965 acres of wetland waters of the U.S. were delineated on-site.

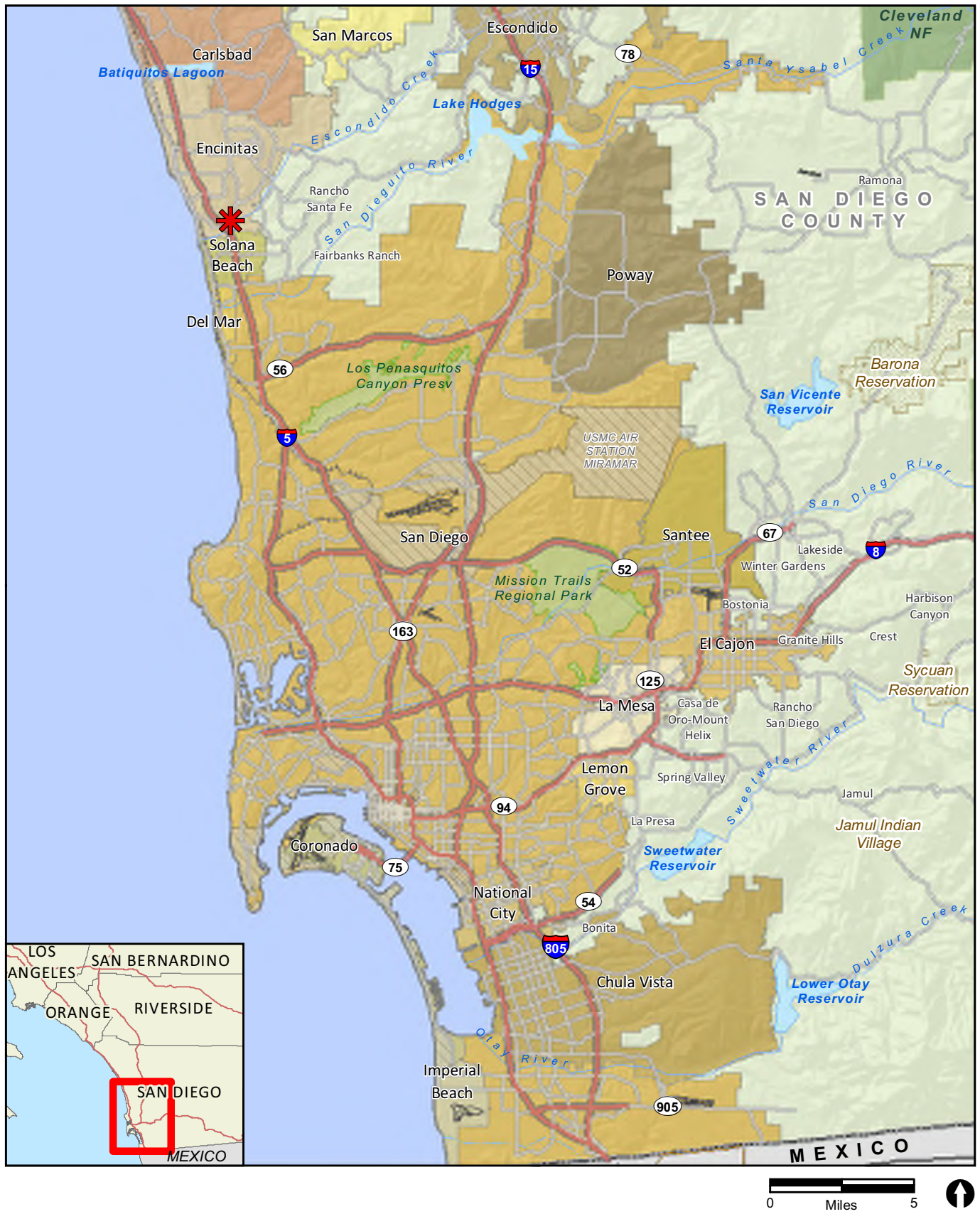
The California Department of Fish and Wildlife (CDFW) jurisdictional areas (waters of the state) consist of 1.275 acres of wetland waters of the state and 0.021 acre and 142 linear feet of streambed.

Regional Water Quality Control Board (RWQCB) jurisdictional areas total 1.275 acres of wetland waters of the state and 0.021 acre and 142 linear feet of non-wetland waters of the state.

1.0 Introduction

This report describes the results of a jurisdictional waters/wetland delineation conducted for the Encinitas Senior Housing Project (project). The project site is located at 3111 Manchester Avenue, Encinitas, California 92007 (Figure 1). The project would consist of the development of an approximately 19.03-acre property located north of Manchester Avenue that is currently utilized primarily as agricultural fields. In addition to this proposed development, the project would include improvements to four existing culverts that convey stormwater from the north side of Manchester Avenue to the south side. The focus of this report is the off-site project areas associated with the proposed improvements to these four culverts and associated dissipation areas south of Manchester Avenue (Figure 2).

The south side of Manchester Avenue generally contains a manufactured slope leading between two and four feet down from the paved road to the estuarine lowlands of the San Elijo lagoon. The work proposed at each culvert is still in the design phase but would generally include the removal of excess sediment and the installation of a Reinforced Concrete Box or Reinforced Concrete Pipe, a headwall and wingwalls, and rip rap. A small excavator and other small equipment and hand tools would be used during construction, accessing each culvert from the Manchester Avenue right-of-way. The four culverts are shown on the U.S. Geological Survey (USGS) 7.5-minute topographic map series, Encinitas quadrangle, Township 13 South, Range 4 West (Figure 3; USGS 1997).







 Project Location

FIGURE 1
Regional Location



-  Existing Culvert Proposed for Improvements
-  Existing CMP Storm Drain
-  Survey Area

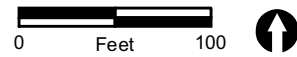
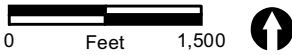
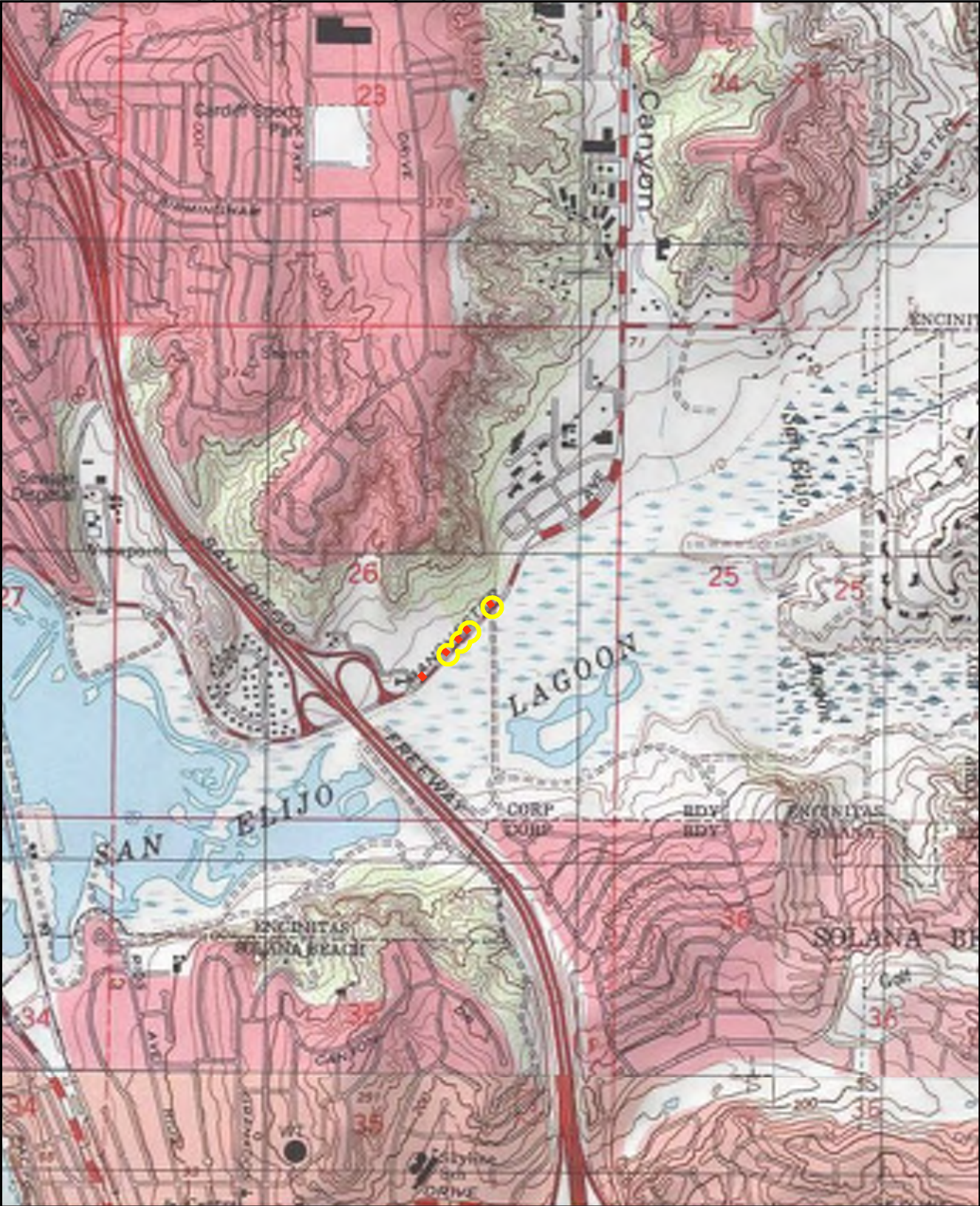


FIGURE 2
Project Location on Aerial Photograph



- Existing CMP Storm Drain
- Survey Area

FIGURE 3
Project Location on USGS Map

2.0 Methods and Jurisdictions

A routine jurisdictional waters/wetland delineation, following the guidelines set forth by USACE (1987 and 2008), was performed to gather field data at locations with potential jurisdictional waters in the project survey areas. The survey areas for this study comprise the four culvert locations south of Manchester Avenue that are proposed to undergo improvements as part of this project, and a 100-foot buffer on each. Including the buffer creates two distinct survey areas the Northeastern Survey Area and the Southwestern Survey Area (see Figure 2). RECON biologist Andrew Smisek conducted the routine delineation fieldwork within the survey areas on August 6, 2019. Prior to conducting the delineation, aerial photographs, USGS topographic maps of the site, U.S. Department of Agriculture (USDA) soil maps of the site, and the U.S. Fish and Wildlife Service National Wetland Inventory were examined. Once on-site, the potential federal and state jurisdictional areas were examined to determine the presence and extent of any jurisdictional waters. A jurisdictional waters/wetland delineation was conducted by BLUE Consulting Group biologist Michael Jefferson on October 17, 2017 within the main project site (north of Manchester Avenue). The results of that delineation are reported in the biological assessment letter report prepared by Mr. Jefferson for this project, dated May 9, 2019.

2.1 USACE Methods and Waters of the U.S.

In accordance with Section 404 of the Clean Water Act, USACE regulates the discharge of dredged or fill material into waters of the U.S. Within southwestern U.S., both wetland and non-wetland waters are delineated in accordance with the 2008 Arid West Regional Supplement (USACE 2008). Mr. Smisek covered the survey areas on foot and inspected those areas exhibiting characteristics of potential jurisdictional waters or wetlands, including the presence of hydrophytic vegetation and any areas with the potential to pond or concentrate a substantial amount water. These methods are described in detail below.

2.1.1 Wetland Waters of the U.S.

Wetland waters of the U.S. were delineated using three parameters: hydrophytic vegetation, hydric soils, and wetland hydrology. According to USACE, indicators for all three parameters must be present to qualify an area as a wetland. The definition of a wetland includes the phrase “under normal circumstances,” because there are situations in which the vegetation of a wetland has been removed or altered as a result of a recent natural event or human activities (USACE 1987).

2.1.1.1 Hydrophytic Vegetation

Vegetation communities comprising partially or entirely hydrophytic plant species were examined, and data for each vegetation stratum (i.e., tree, shrub, herb, and vine) were recorded on the datasheet provided in the 2008 Arid West Regional Supplement (USACE

2008). The percent absolute cover of each species present was visually estimated and recorded.

First, the wetland indicator status of each species recorded within a vegetation community was determined by using the National Wetland Plant List (Lichvar et al. 2016). Dominant species with an indicator status of NI (No Indicator) or not listed in the 2016 National Wetland Plant List were evaluated as either wetland or upland indicator species based on local professional knowledge of where the species are most often observed in habitats that are characteristic in southern California.

The dominance test was then used to determine which vegetation community qualified as hydrophytic vegetation at each site. In situations where a site failed the dominance test but contained positive indicators of hydric soils and/or wetland hydrology, the prevalence index was used. The presence or absence of morphological adaptations was noted; however, none of the sampled wetland areas required an analysis of morphological adaptations to determine if the vegetation was hydrophytic.

2.1.1.2 Hydric Soils

Sample points were selected within potential wetland areas and where the apparent boundary between wetland and upland was inferred based on changes in the composition of the vegetation and topography. Soil pits were dug to a depth of at least 18 inches or to a depth necessary to determine soil color, evidence of soil saturation, depth to groundwater, and indicators of a reducing soil environment (e.g., mottling, gleying, or hydrogen sulfide odor). A Munsell Soil-Color Book (2009) was used to determine soil colors. The 2008 Arid West Regional Supplement (USACE 2008) and the Field Indicators of Hydric Soils in the United States guide (USDA 2017) were used to determine the presence of hydric soil indicators.

2.1.1.3 Wetland Hydrology

Hydrologic information for the site was obtained by reviewing USGS topographic maps and by directly observing hydrology indicators in the field. All portions of any potentially occurring wetlands or non-wetland waters within the survey areas were inspected for signs of hydrology as defined in the 2008 Arid West Regional Supplement (USACE 2008). The location of any water conveyance structures, such as culverts, that may influence the hydrology of any potentially jurisdictional resource were recorded and considered when making a hydrology determination.

2.1.2 Non-wetland Waters of the U.S.

Some areas delineated as non-wetland waters of the U.S. may lack wetland vegetation or hydric soil characteristics. Hydric soil indicators may be missing, because topographic position precludes ponding and subsequent development of hydric soils. Absence of wetland vegetation can result from frequent scouring due to rapid water flow. These types of jurisdictional waters are delineated by the lateral and upstream/downstream extent of the

OHW of the particular drainage or depression, which is identified by the presence of hydrogeomorphic OHW indicators.

2.2 CDFW Methods and Waters of the State

Under sections 1600–1607 of the California Fish and Game Code, the CDFW regulates activities that would divert or obstruct the natural flow or would substantially change the bed, channel, or bank of any river, stream, or lake that supports fish or wildlife. The CDFW has jurisdiction over riparian habitats that support hydrophytic vegetation associated with watercourses. The locations of hydrophytic vegetation and jurisdictional waters within the survey areas were determined using the methods described in Section 2.1, above. Waters of the state under CDFW jurisdiction were delineated at the outer edge of hydrophytic vegetation or at the top of bank, whichever is wider.

2.3 RWQCB Methods and Waters of the State

The RWQCB is the regional agency responsible for protecting water quality in California. The jurisdiction of this agency includes all waters of the state and all waters of the United States as mandated by Section 401 in the Clean Water Act and the California Porter-Cologne Water Quality Control Act. State waters under RWQCB jurisdiction are all waters that meet one of three criteria—hydrology, hydric soils, or wetland vegetation—and generally include, but are not limited to, all wetland and non-wetland waters under the jurisdiction of USACE. The presence and locations of hydrology, hydric soils, and wetland vegetation within the survey areas were determined using the methods described in Section 2.1, above.

3.0 Results of Field Data

The hydrophytic vegetation units, soil types, and hydrology observed in the survey areas are discussed below. The Wetland Determination Forms completed for each sample point are included as Attachment 1.

3.1 Vegetation

The following ten vegetation communities or land cover types were mapped within the survey areas: south coastal salt marsh, coastal brackish marsh, herbaceous wetland, southern willow scrub, mule fat scrub, coastal scrub, intertidal estuary, Diegan coastal sage scrub, disturbed habitat, and urban/developed land (Figure 4). These vegetation communities and land cover types, along with their corresponding Holland/Oberbauer code and acreage within the survey areas, are summarized in Table 1 below. A brief description of each community, including the dominant plant species observed, is also provided below.

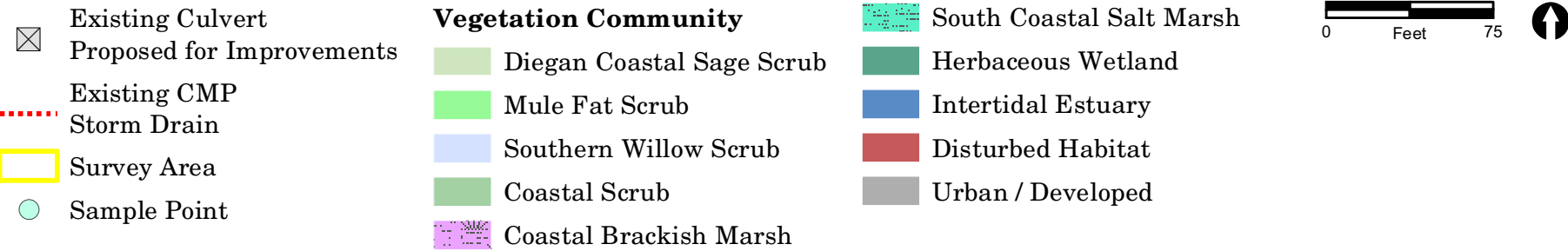
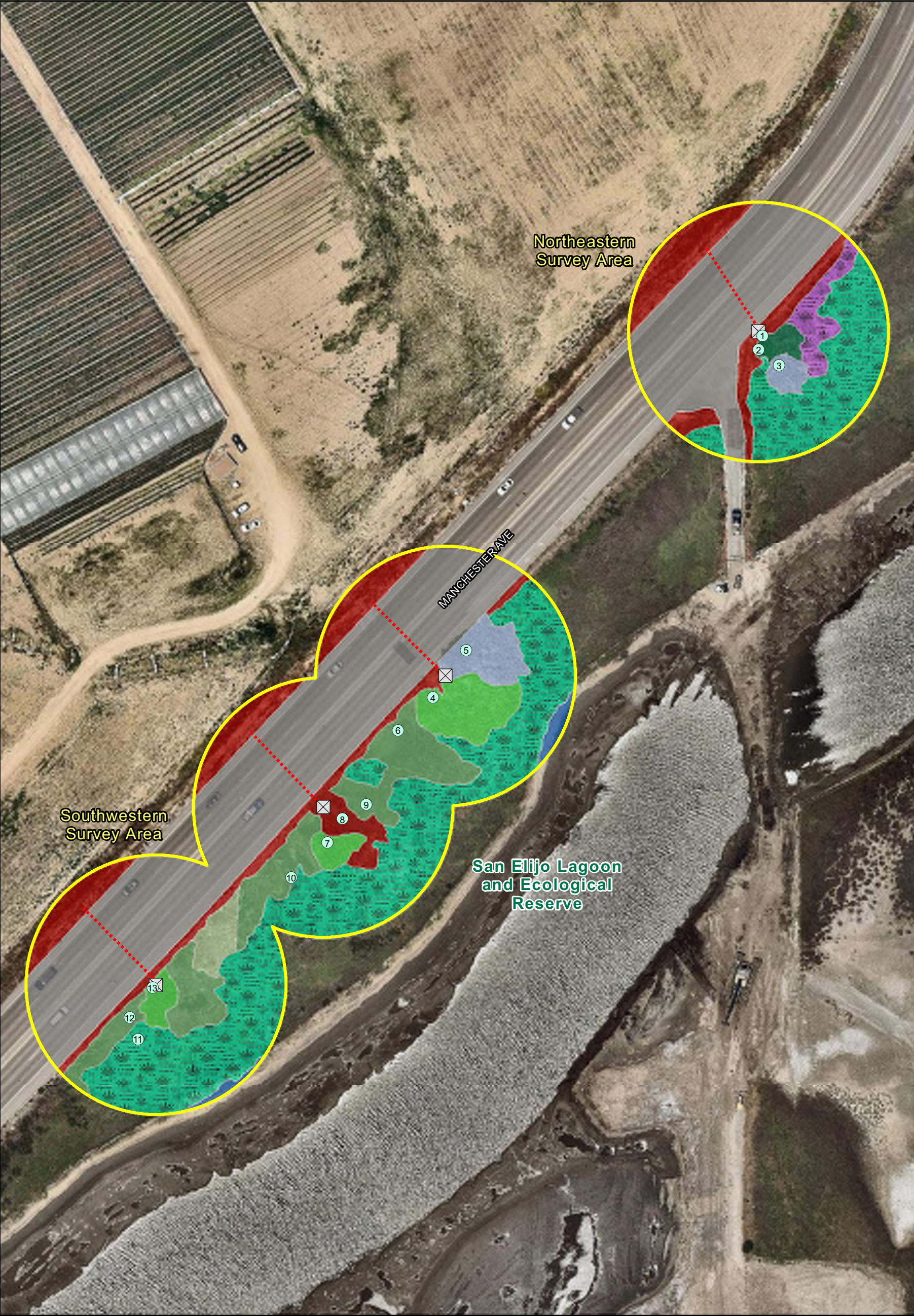


FIGURE 4
Existing Biological Resources

Table 1 Vegetation Communities/Land Cover Types within the Survey Areas	
Community or Type (Holland/Oberbauer Code)	Acres
south coastal salt marsh (52120)	0.806
coastal brackish marsh (52200)	0.042
herbaceous wetland (52510)	0.017
southern willow scrub (63320)	0.072
mule fat scrub (63310)	0.109
coastal scrub (32000)	0.228
intertidal estuary (64132)	0.021
Diegan coastal sage scrub (32500)	0.032
Disturbed habitat (11300)	0.365
Urban/developed land (12000)	1.038
Total	2.730

3.1.1 Areas with Hydrophytic Vegetation

The following six vegetation communities within the project area contain hydrophytic vegetation: south coastal salt marsh, coastal brackish marsh, herbaceous wetland, southern willow scrub, mule fat scrub, and coastal scrub.

South coastal salt marsh occurs within the majority of the survey areas southeast of the road (see Figure 4). It generally occurs within the low flat portions of the lagoon and extends as a large expanse throughout the lagoon outside the survey areas. The south coastal salt marsh areas are dominated by alkali heath (*Frankenia salina*; Facultative-Wetland [FACW]) and salty susan (*Jaumea carnosa*; Obligate [OBL]), which tend to separately dominate different portions of this vegetation community (Photograph 1). Other commonly occurring species include salt grass (*Distichlis spicata*; Facultative [FAC]), glasswort (*Arthrocnemum subterminale*; FACW), coastal goldenbush (*Isocoma menziesii*; FAC), and large-flower salt marsh dodder (*Cuscuta pacifica* var. *pacifica*; NI).

Coastal brackish marsh occurs as a small patch Northeastern Survey Area, generally occurring near the road (see Figure 4). This habitat consists of a dense stand of common tule (*Schoenoplectus acutus* var. *occidentalis*; OBL) with occasional great marsh evening-primrose (*Oenothera elata*; FACW) and coastal goldenbush.

Herbaceous wetland occurs as a small patch around the outfall of the existing culvert in the Northeastern Survey Area (see Figure 4). This patch is dominated by great marsh evening-primrose, which has a vegetation cover of approximately 50 percent here (Photograph 2).

Southern willow scrub occurs as two small patches, one in the central portion of the Northeastern Survey Area, just south of the herbaceous wetland described above, and the other in the northeastern portion of the Southwestern Survey Area, just northeast of an existing culvert outfall (see Figure 4). Both patches are dominated by mature arroyo willow (*Salix lasiolepis*; FACW). The patch in the Northeastern Survey Area is comprised of just



PHOTOGRAPH 1
View of South Coastal Salt Marsh, Facing Northeast



PHOTOGRAPH 2
View of Herbaceous Wetland, Facing Northwest

one arroyo willow, with horseweed (*Erigeron canadensis*; FACU) and great marsh evening-primrose in the understory. Aside from being dominated by arroyo willow, the patch of southern willow scrub in the Southwestern Survey Area also contains scattered mule fat (*Baccharis salicifolia*; FAC; Photograph 3).

Mule fat scrub occurs as three patches in Southwestern Survey Area, generally occurring adjacent to the outfalls of the existing culverts (see Figure 4). All three patches of this vegetation community are dominated by mule fat (Photograph 4), with the two northeastern patches containing substantial vegetation cover of arroyo willow. The understory of the three mule fat scrub patches is sparse with occasional herbaceous species, such as western ragweed (*Ambrosia psilostachya*; FACU) and great marsh evening-primrose.

Coastal scrub occurs as patches interspersed within the Southwestern Survey Area, generally between the existing culvert outfalls and on slightly sloped areas between the disturbed habitat along the road and the expanses of southern coastal salt marsh (see Figure 4). These coastal scrub areas are dominated by coastal goldenbush and contain a variety of herbaceous species in the understory, including alkali heath and western ragweed (Photograph 5). They appear to occur along the transition between the upland habitats along the slope of the road and the lowlands within the lagoon.

3.1.2 Areas Lacking Hydrophytic Vegetation

Vegetation communities or land cover types within the project area that lack hydrophytic vegetation include areas mapped as intertidal estuary, Diegan coastal sage scrub, disturbed habitat, and urban/developed land. The small patch of Diegan coastal sage scrub is dominated by California buckwheat (*Eriogonum fasciculatum*; NI). Intertidal estuary was mapped within the unvegetated portions of the San Elijo Lagoon, which occurs in the eastern and southeastern portions of the Southwestern Survey Area (see Figure 4). Disturbed habitat was mapped mostly along the edge of the road and the top of the slope leading down from the road. These areas were dominated by a combination of native and non-native herbaceous species, such as horseweed, short-pod mustard (*Hirschfeldia incana*; NI), telegraph weed (*Heterotheca grandiflora*; NI), and occasional great marsh evening-primrose. The small portion of disturbed habitat in the central portion of the Southwestern Survey Area is dominated by freeway iceplant (*Carpobrotus edulis*; NI) and western ragweed and occurs on a small terrace extending southeast of the outfall of an existing culvert. The areas mapped as urban/developed areas include the paved roadway of Manchester Avenue (see Figure 4).

3.2 Soils

Information on the soil types occurring in the survey areas is summarized from the Soil Survey for San Diego County (USDA 1973) and the Hydric Soils of California list (hydric soil list) obtained from the Natural Resource Conservation Service (2015).



PHOTOGRAPH 3
View of Southern Willow Scrub, Facing Southwest



PHOTOGRAPH 4
View of Mule Fat Scrub, Facing Southwest



PHOTOGRAPH 5
View of Coastal Scrub, Facing East

Soil types mapped within the survey areas are shown on Figure 5 and include Corralitos loamy sand, 5 to 9 percent slopes; Lagoons of San Diego Area; and Tidal flats. Lagoons of San Diego Area and Tidal flats are both listed as hydric soils in San Diego County.

Hydric soil indicators were observed at Sample Points 3, 5, 6, 9, 10, and 11 (see Figure 4). Redox dark surface was observed at Sample Point 3, depleted matrix with redox concentrations was observed at Sample Point 5, and sandy redox was observed at Sample Points 6, 9, 10, and 11. No hydric soil indicators were observed at Sample Points 1, 4, 7, 8, or 13. Although some redox features were observed at Sample Points 2 and 12, these features occurred in a layer at least 10 inches below the soil surface. Due to the depth of these features, hydric soil indicator criteria were not met at these sample points.

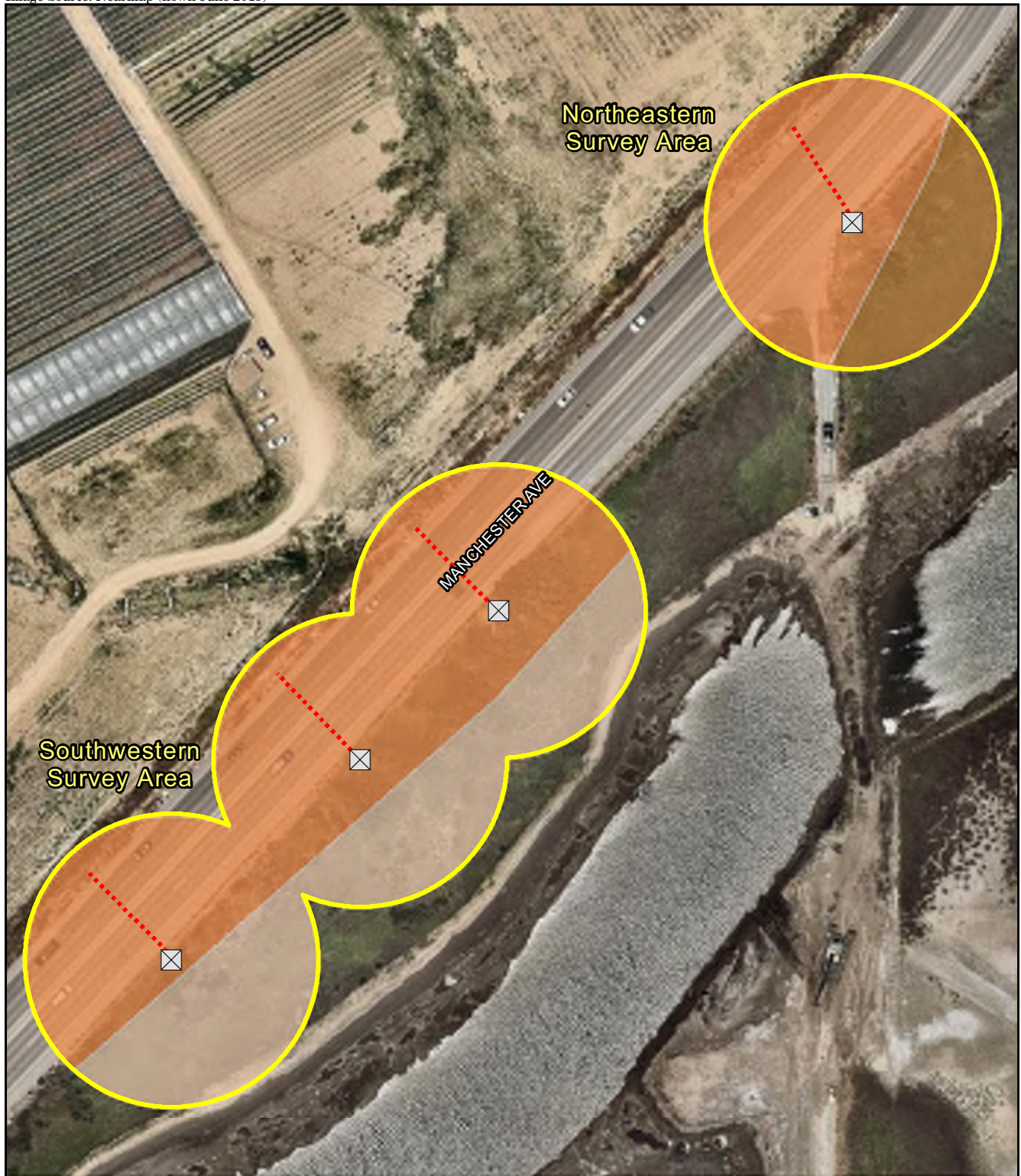
3.3 Hydrology




Within the survey areas, hydrology indicators were met at Sample Points 3, 5, 6, 9, 10, and 11 (see Figure 4). The same indicator, surface soil cracks, was observed at all six of these sample points. These sample points all occur in the lowland areas within the lagoon, below the sloped areas associated with the elevated road and small alluviums associated with the outfalls of the existing culverts. The areas observed as having soil cracking occur above the intertidal zone of the lagoon; therefore, it is unlikely they are regularly inundated. However, they likely undergo regular saturation due to a combination of tidal influence and concentrated runoff from adjacent uplands. No sample points were taken within the portions of the survey area mapped as intertidal estuary. However, hydrology is assumed to occur in these areas based on the lack of vegetation and inundation observed on aerial imagery. These intertidal estuary areas occur as part of the San Elijo Lagoon, which has connectivity to the Pacific Ocean, a Traditionally Navigable Water.

The mouth of the four culvert outfalls exhibited small areas of hydrology indicators in the form of water staining and/or a small amount of drift deposit debris. However, these hydrology indicators did not extend beyond the mouth of the culverts, covering an area of only approximately 5 to 10 square feet. The indicators did not extend into the adjacent habitats, and therefore were not included in the hydrology section of the sample points in these areas (see Attachment 1). No OHWM indicators were detected beyond the mouths of these culverts; therefore, no active floodplains were observed in the survey areas.




4.0 Location of Jurisdictional Waters

Acreages of jurisdictional waters are provided in Table 2 by jurisdiction and resource type. Figure 6 shows the locations of the jurisdictional waters identified within the survey areas for each agency jurisdiction.



-  Existing Culvert
Proposed for Improvements
-  Existing CMP
Storm Drain
-  Survey Area

Soil Type

-  Corralitos loamy sand, 5 to 9 percent slopes
-  Lagoons of San Diego Area
-  Tidal flats

0 Feet 100



FIGURE 5
Project Location on Soil Map

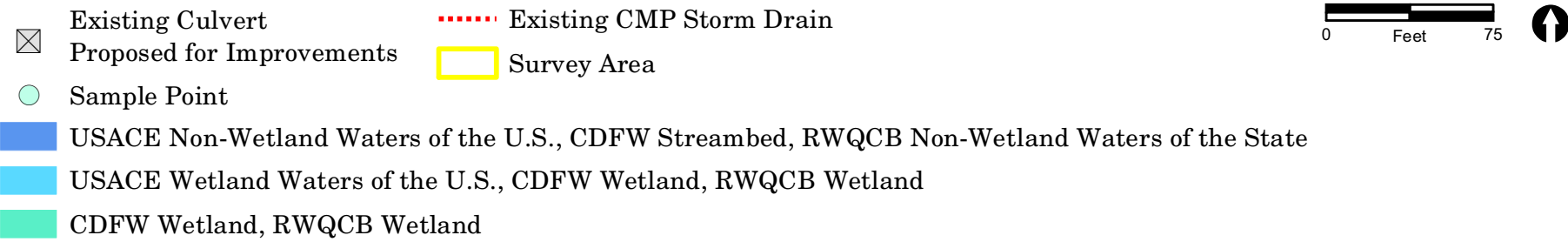


FIGURE 6
Jurisdictional Resources

Table 2 Existing Jurisdictional Waters within the Survey Areas	
Jurisdictional Areas	Total Acres (linear feet)
USACE Total Jurisdiction	0.965 (142)
Wetland Waters of the U.S.	0.944
Non-wetland Waters of the U.S.**	0.021 (142)
CDFW and RWQCB Total Jurisdictional Areas*	1.296 (142)
Wetland Waters of the State (Riparian Habitat)	1.275
Non-wetland Waters of the State (Streambed)**	0.021 (142)
*CDFW/RWQCB area of jurisdiction includes all USACE jurisdictional waters.	
**Non-wetland waters/streambed area not included in the wetland/riparian areas so that no area is counted twice for the same jurisdiction.	

4.1 USACE Waters of the U.S.

A total of 0.021 acre and 142 linear feet of non-wetland waters of the U.S. under the jurisdiction of USACE were delineated within the survey areas (see Figure 6). Jurisdictional non-wetland waters within the survey areas include unvegetated areas mapped as intertidal estuary. These estuary areas occur as part of the San Elijo Lagoon, which has connectivity to the Pacific Ocean, a Traditional Navigable Waterway.

Wetland waters of the U.S. total 0.944 acres on-site (see Figure 6). The wetland areas mostly follow topographic boundaries that generally coincide with changes in vegetation communities, and include areas mapped as south coastal salt marsh, southern willow scrub, and coastal scrub. Six of the sample points taken (Sample Points 3, 5, 6, 9, 10, and 11) each met all three wetland parameters (see Attachment 1).

4.2 CDFW Waters of the State

On-site areas delineated as waters of the state under the jurisdiction of the CDFW (under Fish and Game Code 1600–1607) include streambed and wetland and total 1.296 acres (see Figure 6). CDFW streambed delineated on-site comprises the unvegetated intertidal estuary areas. CDFW streambed on-site totals 0.021 acre and 142 linear feet.

CDFW wetland on-site totals 1.275 acres. This includes all portions of the survey areas mapped as south coastal salt marsh, coastal brackish marsh, herbaceous wetland, southern willow scrub, mule fat scrub, and coastal scrub, which all occur in association with the San Elijo Lagoon (see Figure 6).

4.3 RWQCB Waters of the State

On-site areas delineated as waters of the state under the jurisdiction of the RWQCB (under Clean Water Act Section 401) completely overlap with CDFW jurisdictional areas (see Figure 6) and comprise the 0.021 acre and 142 linear feet of streambed, as well as the 1.275 acres of hydrophytic vegetation mapped as south coastal salt marsh, coastal brackish

marsh, herbaceous wetland, southern willow scrub, mule fat scrub, and coastal scrub. The other areas of vegetation on-site did not meet the criteria for hydrophytic vegetation and thus did not meet the wetland standard used by the RWQCB (see Figure 6).

5.0 Regulatory Issues

Due to a no net loss policy implemented by USACE, CDFW, and RWQCB, the first consideration in project planning should be avoidance of jurisdictional waters. USACE, CDFW, and RWQCB jurisdictional waters are regulated by the federal, state, and local governments. All impacts are considered significant and need to be avoided to the greatest extent possible.

Unavoidable impacts to jurisdictional waters may be authorized through permit authorizations from USACE through the Section 404 Permit Program from the CDFW through a 1602 Streambed Alteration Agreement, and from the RWQCB through a 401 State Water Quality Certification. Most utility projects are permitted through an USACE Nationwide Permit track. The CDFW and RWQCB also have a specialized permit track for utility projects. Approved impacts to USACE, CDFW, and RWQCB jurisdictional waters require mitigation through habitat creation and/or enhancement, and/or purchase of credits in a mitigation bank to achieve a no net loss of jurisdictional waters (as determined by a qualified restoration specialist in consultation with the regulatory agencies). In addition, regulatory agencies may require that a buffer be maintained between jurisdictional waters/wetlands and any development.

6.0 References Cited

Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin.

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1987 *Corps of Engineers Wetlands Delineation Manual*. Technical Report Y-87-1, Department of the Army. January.

2008 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region*. Prepared by U.S. Army Engineer Research and Development Center. December.

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1973 Soil Survey, San Diego Area, California. Edited by Roy H. Bowman. Soil Conservation Service and Forest Service.

2017 Field Indicators of Hydric Soils in the United States: A Guide for Identifying and Delineating Hydric Soils, Version 8.1.

United States Geological Survey (USGS)

1997 Encinitas quadrangle, California 7.5-minute topographical map.

ATTACHMENT 1

Wetland Determination Forms

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Encinitas Senior Housing City/County: Encinitas, CA Sampling Date: August 6, 2019
 Applicant/Owner: Greystar State: CA Sampling Point: 1
 Investigator(s): Andrew Smisek Section, Township, Range: Encinitas quadrangle, 1975, T13S, R04W
 Landform (hillslope, terrace, etc.): small slope Local relief (concave, convex, none): none Slope (%): 20
 Subregion (LRR): C - Mediterranean California Lat: 33.01353769130 Long: -117.25982564400 Datum: WGS84
 Soil Map Unit Name: Corralitos loamy sand, 5 to 9 percent slopes NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Is the Sampled Area within a Wetland?	Yes <input type="radio"/>	No <input checked="" type="radio"/>
Hydric Soil Present?	Yes <input checked="" type="radio"/>	No <input type="radio"/>			
Wetland Hydrology Present?	Yes <input checked="" type="radio"/>	No <input type="radio"/>			
Remarks: This sample point occurs along the slope leading down from the road just east of the existing culvert.					

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:			
1. _____				Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)			
2. _____				Total Number of Dominant Species Across All Strata: <u>4</u> (B)			
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.0</u> % (A/B)			
4. _____							
Total Cover: <u>1</u> %							
<u>Sapling/Shrub Stratum</u>				Prevalence Index worksheet:			
1. <i>Isocoma menziesii</i>	1	Yes	FAC	Total % Cover of: _____ Multiply by: _____			
2. _____				OBL species	<u>2</u>	x 1 =	<u>0</u>
3. _____				FACW species	<u>7</u>	x 2 =	<u>14</u>
4. _____				FAC species	<u>1</u>	x 3 =	<u>3</u>
5. _____				FACU species	<u>15</u>	x 4 =	<u>60</u>
Total Cover: <u>1</u> %				UPL species	<u>18</u>	x 5 =	<u>90</u>
<u>Herb Stratum</u>				Column Totals:	<u>41</u>	(A)	<u>167</u> (B)
1. <i>Erigeron canadensis</i>	15	Yes	FACU	Prevalence Index = B/A = <u>4.07</u>			
2. <i>Hirschfeldia incana</i>	12	Yes	NI	Hydrophytic Vegetation Indicators:			
3. <i>Oenothera elata</i>	7	Yes	FACW	<input checked="" type="checkbox"/> Dominance Test is >50%			
4. <i>Glebionis coronaria</i>	3	No	NI	<input checked="" type="checkbox"/> Prevalence Index is ≤3.0 ¹			
5. <i>Raphinus sativus</i>	2	No	NI	<input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)			
6. <i>Heterotheca grandiflora</i>	1	No	NI	<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)			
7. _____				¹ Indicators of hydric soil and wetland hydrology must be present.			
8. _____							
Total Cover: <u>40</u> %							
<u>Woody Vine Stratum</u>				Hydrophytic Vegetation Present?			
1. _____				Yes <input type="radio"/> No <input checked="" type="radio"/>			
2. _____							
Total Cover: _____ %							
% Bare Ground in Herb Stratum _____ %		% Cover of Biotic Crust _____ %					

Remarks: Although *Oenothera elata* occurs along much of this slope along the road, the vegetation here does not meet the hydrophytic standard.

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture ³	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-16	10YR 3/2	100					loamy sand	very coarse
16-18	10YR 4/3	100					loamy sand	fine sand

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix. ²Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

³Soil Textures: Clay, Silty Clay, Sandy Clay, Loam, Sandy Clay Loam, Sandy Loam, Clay Loam, Silty Clay Loam, Silt Loam, Silt, Loamy Sand, Sand.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) (LRR C) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR D) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Vernal Pools (F9) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | |

Indicators for Problematic Hydric Soils:⁴

- ☐ 1 cm Muck (A9) (**LRR C**)
- ☐ 2 cm Muck (A10) (**LRR B**)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

⁴Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks: No hydric soil indicators observed.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- | | |
|--|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Biotic Crust (B12) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) (Nonriverine) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | |

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (**Riverine**)
- ☐ Sediment Deposits (B2) (**Riverine**)
- ☐ Drift Deposits (B3) (**Riverine**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Thin Muck Surface (C7)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): _____

Water Table Present? Yes ☐ No ☒ Depth (inches): _____

Saturation Present? Yes ☐ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: No hydrology indicators observed.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Encinitas Senior Housing City/County: Encinitas, CA Sampling Date: August 6, 2019
 Applicant/Owner: Greystar State: CA Sampling Point: 2
 Investigator(s): Andrew Smisek Section, Township, Range: Encinitas quadrangle, 1975, T13S, R04W
 Landform (hillslope, terrace, etc.): small alluvium Local relief (concave, convex, none): concave Slope (%): 10
 Subregion (LRR): C - Mediterranean California Lat: 33.01350833460 Long: -117.25983447500 Datum: WGS84
 Soil Map Unit Name: Corralitos loamy sand, 5 to 9 percent slopes NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Is the Sampled Area within a Wetland?	Yes <input type="radio"/>	No <input checked="" type="radio"/>
Hydric Soil Present?	Yes <input type="radio"/>	No <input checked="" type="radio"/>			
Wetland Hydrology Present?	Yes <input type="radio"/>	No <input checked="" type="radio"/>			
Remarks: This sample point occurs in an area mapped as herbaceous wetland, which occurs adjacent to the outfall of an existing culvert.					

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:			
1. _____				Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)			
2. _____				Total Number of Dominant Species Across All Strata: <u>1</u> (B)			
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0 %</u> (A/B)			
4. _____							
Total Cover: <u>58 %</u>							
Sapling/Shrub Stratum				Prevalence Index worksheet:			
1. _____				Total % Cover of: _____ Multiply by: _____			
2. _____				OBL species	<u>50</u>	x 1 =	<u>0</u>
3. _____				FACW species	<u>5</u>	x 2 =	<u>100</u>
4. _____				FAC species	<u>3</u>	x 3 =	<u>0</u>
5. _____				FACU species	<u>5</u>	x 4 =	<u>20</u>
Total Cover: <u>58 %</u>				UPL species	<u>3</u>	x 5 =	<u>15</u>
				Column Totals:	<u>58</u>	(A)	<u>135</u> (B)
				Prevalence Index = B/A = <u>2.33</u>			
Herb Stratum				Hydrophytic Vegetation Indicators:			
1. <i>Oenothera elata</i>	<u>50</u>	Yes	FACW	<input checked="" type="checkbox"/> Dominance Test is >50%			
2. <i>Erigeron canadensis</i>	<u>5</u>	No	FACU	<input checked="" type="checkbox"/> Prevalence Index is ≤3.0 ¹			
3. <i>Raphinus sativus</i>	<u>3</u>	No	NI	<input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)			
4. _____				<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)			
5. _____							
6. _____							
7. _____							
8. _____							
Total Cover: <u>58 %</u>							
Woody Vine Stratum				¹ Indicators of hydric soil and wetland hydrology must be present.			
1. _____							
2. _____				Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/>			
Total Cover: <u>58 %</u>							
% Bare Ground in Herb Stratum _____ %			% Cover of Biotic Crust _____ %				

Remarks: Area mapped as herbaceous wetland due to dominance of *Oenothera*. This area meets the hydrophytic vegetation standard.

SOIL

Sampling Point: 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture ³	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 2/2	100					loamy sand	
4-11	10YR 3/2	100					loamy sand	
11-18	10YR 3/2	95	10YR 4/6	5	C	M	loamy sand	scattered redox features

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix. ²Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

³Soil Textures: Clay, Silty Clay, Sandy Clay, Loam, Sandy Clay Loam, Sandy Loam, Clay Loam, Silty Clay Loam, Silt Loam, Silt, Loamy Sand, Sand.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (**LRR C**)
- ☐ 1 cm Muck (A9) (**LRR D**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)

- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils:⁴

- ☐ 1 cm Muck (A9) (**LRR C**)
- ☐ 2 cm Muck (A10) (**LRR B**)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

⁴Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks: Although some redox features were observed in the 11-18 inches layer, the depth of this layer does not meet any hydric soil criteria.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1) (**Nonriverine**)
- ☐ Sediment Deposits (B2) (**Nonriverine**)
- ☐ Drift Deposits (B3) (**Nonriverine**)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Plowed Soils (C6)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (**Riverine**)
- ☐ Sediment Deposits (B2) (**Riverine**)
- ☐ Drift Deposits (B3) (**Riverine**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Thin Muck Surface (C7)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☒

Depth (inches): _____

Water Table Present? Yes ☐ No ☒

Depth (inches): _____

Saturation Present? Yes ☐ No ☒
(includes capillary fringe)

Depth (inches): _____

Wetland Hydrology Present? Yes ☐ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Although this sample point occurs downstream of the outfall of an existing culvert, no hydrology indicators were observed.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Encinitas Senior Housing City/County: Encinitas, CA Sampling Date: August 6, 2019
 Applicant/Owner: Greystar State: CA Sampling Point: 3
 Investigator(s): Andrew Smisek Section, Township, Range: Encinitas quadrangle, 1975, T13S, R04W
 Landform (hillslope, terrace, etc.): lowland Local relief (concave, convex, none): none Slope (%): 3-5
 Subregion (LRR): C - Mediterranean California Lat: 33.01347571330 Long: -117.25978273500 Datum: WGS84
 Soil Map Unit Name: Corralitos loamy sand, 5 to 9 percent slopes NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Is the Sampled Area within a Wetland?	Yes <input checked="" type="radio"/> No <input type="radio"/>
Hydric Soil Present?	Yes <input checked="" type="radio"/>	No <input type="radio"/>		
Wetland Hydrology Present?	Yes <input checked="" type="radio"/>	No <input type="radio"/>		
Remarks: This sample point occurs under the canopy of an arroyo willow within a low and flat area east of the culvert outfall.				

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:			
1. <i>Salix lasiolepis</i>	50	Yes	FACW	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)			
2.				Total Number of Dominant Species Across All Strata: <u>3</u> (B)			
3.				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.7</u> % (A/B)			
4.							
Total Cover: <u>50</u> %							
Sapling/Shrub Stratum				Prevalence Index worksheet:			
1.				Total % Cover of: Multiply by:			
2.				OBL species	x 1 =	<u>0</u>	
3.				FACW species	x 2 =	<u>132</u>	
4.				FAC species	x 3 =	<u>0</u>	
5.				FACU species	x 4 =	<u>0</u>	
Total Cover: <u> </u> %				UPL species	x 5 =	<u>150</u>	
				Column Totals:	<u>96</u> (A)	<u>282</u> (B)	
Herb Stratum				Prevalence Index = B/A = <u>2.94</u>			
1. <i>Erigeron canadensis</i>	30	Yes	NI	Hydrophytic Vegetation Indicators:			
2. <i>Oenothera elata</i>	10	Yes	FACW	<input checked="" type="checkbox"/> Dominance Test is >50%			
3. <i>Frankenia salina</i>	5	No	FACW	<input checked="" type="checkbox"/> Prevalence Index is ≤3.0 ¹			
4. <i>Arthrocnemum subterminale</i>	1	No	FACW	<input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)			
5.				<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)			
6.				¹ Indicators of hydric soil and wetland hydrology must be present.			
7.							
8.							
Total Cover: <u>46</u> %				Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/>			
Woody Vine Stratum							
1.							
2.							
Total Cover: <u> </u> %							
% Bare Ground in Herb Stratum <u> </u> %			% Cover of Biotic Crust <u> </u> %				

Remarks: Area mapped as southern willow scrub and vegetation meets hydrophytic standard.

SOIL

Sampling Point: 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features			Loc ²	Texture ³	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0-6	10YR 3/2	98	7.5YR 4/6	2	C	M	sandy loam	
6-12	10YR 3/2	95	7.5YR 4/6	5	C	M	sandy loam	
12-18	10YR 4/1	90	7.5YR 4/6	10	C	M	loamy sand	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix. ²Location: PL=Pore Lining, RC=Root Channel, M=Matrix.³Soil Textures: Clay, Silty Clay, Sandy Clay, Loam, Sandy Clay Loam, Sandy Loam, Clay Loam, Silty Clay Loam, Silt Loam, Silt, Loamy Sand, Sand.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) (LRR C) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR D) | <input checked="" type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Vernal Pools (F9) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | |

Indicators for Problematic Hydric Soils:⁴

- ☐ 1 cm Muck (A9) (**LRR C**)
- ☐ 2 cm Muck (A10) (**LRR B**)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

⁴Indicators of hydrophytic vegetation and wetland hydrology must be present.**Restrictive Layer (if present):**

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks: Soils observed meet the criteria for the redox dark surface indicator.

HYDROLOGY

Wetland Hydrology Indicators:**Primary Indicators (any one indicator is sufficient)**

- | | |
|--|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Biotic Crust (B12) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) (Nonriverine) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input checked="" type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | |

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (**Riverine**)
- ☐ Sediment Deposits (B2) (**Riverine**)
- ☐ Drift Deposits (B3) (**Riverine**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Thin Muck Surface (C7)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:Surface Water Present? Yes ☐ No ☒ Depth (inches): _____Water Table Present? Yes ☐ No ☒ Depth (inches): _____Saturation Present? Yes ☐ No ☒ Depth (inches): _____
(includes capillary fringe)**Wetland Hydrology Present?** Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Soil cracks observed throughout this area.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Encinitas Senior Housing City/County: Encinitas, CA Sampling Date: August 6, 2019
 Applicant/Owner: Greystar State: CA Sampling Point: 4
 Investigator(s): Andrew Smisek Section, Township, Range: Encinitas quadrangle, 1975, T13S, R04W
 Landform (hillslope, terrace, etc.): small terrace Local relief (concave, convex, none): none Slope (%): 10
 Subregion (LRR): C - Mediterranean California Lat: 33.01276491610 Long: -117.26064485700 Datum: WGS84
 Soil Map Unit Name: Corralitos loamy sand, 5 to 9 percent slopes NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Is the Sampled Area within a Wetland?	Yes <input type="radio"/> No <input checked="" type="radio"/>
Hydric Soil Present?	Yes <input checked="" type="radio"/>	No <input type="radio"/>		
Wetland Hydrology Present?	Yes <input checked="" type="radio"/>	No <input type="radio"/>		
Remarks: This sample point occurs in an area mapped as mule fat scrub occurring on a small terrace adjacent to the outfall of the existing culvert.				

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:			
1. <i>Salix lasiolepis</i>	20	Yes	FACW	Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)			
2.				Total Number of Dominant Species Across All Strata: <u>4</u> (B)			
3.				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>75.0 %</u> (A/B)			
4.							
Total Cover: <u>20 %</u>							
Sapling/Shrub Stratum				Prevalence Index worksheet:			
1. <i>Baccharis salicifolia</i>	60	Yes	FAC	Total % Cover of: Multiply by:			
2.				OBL species	<u>0</u>	x 1 =	<u>0</u>
3.				FACW species	<u>22</u>	x 2 =	<u>44</u>
4.				FAC species	<u>60</u>	x 3 =	<u>180</u>
5.				FACU species	<u>1</u>	x 4 =	<u>4</u>
Total Cover: <u>60 %</u>				UPL species	<u>3</u>	x 5 =	<u>15</u>
				Column Totals:	<u>86</u>	(A)	<u>243</u> (B)
				Prevalence Index = B/A = <u>2.83</u>			
Herb Stratum				Hydrophytic Vegetation Indicators:			
1. <i>Oenothera elata</i>	2	Yes	FACW	<input checked="" type="checkbox"/> Dominance Test is >50%			
2. <i>Brassica nigra</i>	2	Yes	NI	<input checked="" type="checkbox"/> Prevalence Index is ≤3.0 ¹			
3. <i>Ambrosia psilostachya</i>	1	No	FACU	<input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)			
4. <i>Erigeron canadensis</i>	1	No	NI	<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)			
5.				¹ Indicators of hydric soil and wetland hydrology must be present.			
6.							
7.							
8.							
Total Cover: <u>6 %</u>							
Woody Vine Stratum				Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/>			
1.							
2.							
Total Cover: <u> </u> %							
% Bare Ground in Herb Stratum <u> </u> %			% Cover of Biotic Crust <u> </u> %				

Remarks: Vegetation mapped as mule fat scrub and meets the hydrophytic standard.

SOIL

Sampling Point: 4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture ³	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-1	10YR 2/1	100					sandy loam	much organic material
1-18	10YR 4/3	100					loamy sand	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix. ²Location: PL=Pore Lining, RC=Root Channel, M=Matrix.³Soil Textures: Clay, Silty Clay, Sandy Clay, Loam, Sandy Clay Loam, Sandy Loam, Clay Loam, Silty Clay Loam, Silt Loam, Silt, Loamy Sand, Sand.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) (LRR C) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR D) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Vernal Pools (F9) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | |

Indicators for Problematic Hydric Soils:⁴

- ☐ 1 cm Muck (A9) (**LRR C**)
- ☐ 2 cm Muck (A10) (**LRR B**)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

⁴Indicators of hydrophytic vegetation and wetland hydrology must be present.**Restrictive Layer (if present):**

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks: No hydric soil indicators observed.

HYDROLOGY

Wetland Hydrology Indicators:**Primary Indicators (any one indicator is sufficient)**

- | | |
|--|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Biotic Crust (B12) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) (Nonriverine) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | |

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (**Riverine**)
- ☐ Sediment Deposits (B2) (**Riverine**)
- ☐ Drift Deposits (B3) (**Riverine**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Thin Muck Surface (C7)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:Surface Water Present? Yes ☐ No ☒ Depth (inches): _____Water Table Present? Yes ☐ No ☒ Depth (inches): _____Saturation Present? Yes ☐ No ☒ Depth (inches): _____
(includes capillary fringe)**Wetland Hydrology Present?** Yes ☐ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: No hydrology indicators observed.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Encinitas Senior Housing City/County: Encinitas, CA Sampling Date: August 6, 2019
 Applicant/Owner: Greystar State: CA Sampling Point: 5
 Investigator(s): Andrew Smisek Section, Township, Range: Encinitas quadrangle, 1975, T13S, R04W
 Landform (hillslope, terrace, etc.): small alluvium Local relief (concave, convex, none): none Slope (%): 5-10
 Subregion (LRR): C - Mediterranean California Lat: 33.01286602300 Long: -117.26056293300 Datum: WGS84
 Soil Map Unit Name: Corralitos loamy sand, 5 to 9 percent slopes NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Is the Sampled Area within a Wetland?	Yes <input checked="" type="radio"/> No <input type="radio"/>
Hydric Soil Present?	Yes <input checked="" type="radio"/>	No <input type="radio"/>		
Wetland Hydrology Present?	Yes <input checked="" type="radio"/>	No <input type="radio"/>		
Remarks: This sample point occurs in lower elevations within an area mapped as southern willow scrub.				

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:			
1. <i>Salix lasiolepis</i>	80	Yes	FACW	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)			
2.				Total Number of Dominant Species Across All Strata: <u>2</u> (B)			
3.				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0 %</u> (A/B)			
4.							
Total Cover: <u>80 %</u>							
Sapling/Shrub Stratum				Prevalence Index worksheet:			
1. <i>Baccharis salicifolia</i>	10	Yes	FAC	Total % Cover of: Multiply by:			
2.				OBL species	<u>0</u>	x 1 =	<u>0</u>
3.				FACW species	<u>80</u>	x 2 =	<u>160</u>
4.				FAC species	<u>10</u>	x 3 =	<u>30</u>
5.				FACU species	<u>0</u>	x 4 =	<u>0</u>
Total Cover: <u>10 %</u>				UPL species	<u>0</u>	x 5 =	<u>0</u>
				Column Totals:	<u>90</u>	(A)	<u>190</u> (B)
				Prevalence Index = B/A = <u>2.11</u>			
Herb Stratum				Hydrophytic Vegetation Indicators:			
1.				<input checked="" type="checkbox"/> Dominance Test is >50%			
2.				<input checked="" type="checkbox"/> Prevalence Index is ≤3.0 ¹			
3.				<input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)			
4.				<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)			
5.							
6.							
7.							
8.							
Total Cover: <u>0 %</u>							
Woody Vine Stratum				¹ Indicators of hydric soil and wetland hydrology must be present.			
1.							
2.				Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/>			
Total Cover: <u>0 %</u>							
% Bare Ground in Herb Stratum <u>0 %</u> % Cover of Biotic Crust <u>0 %</u>							

Remarks: Vegetation meets hydrophytic vegetation standard.

SOIL

Sampling Point: 5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture ³	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-3	10YR 3/2	100					loamy sand	
3-18	10YR 4/2	90	10YR 4/6	10	C	M	sandy loam	redox features throughout

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix. ²Location: PL=Pore Lining, RC=Root Channel, M=Matrix.³Soil Textures: Clay, Silty Clay, Sandy Clay, Loam, Sandy Clay Loam, Sandy Loam, Clay Loam, Silty Clay Loam, Silt Loam, Silt, Loamy Sand, Sand.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- | | |
|--|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) (LRR C) | <input checked="" type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR D) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Vernal Pools (F9) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | |

Indicators for Problematic Hydric Soils:⁴

- ☐ 1 cm Muck (A9) (**LRR C**)
- ☐ 2 cm Muck (A10) (**LRR B**)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

⁴Indicators of hydrophytic vegetation and wetland hydrology must be present.**Restrictive Layer (if present):**

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks: Soils meet the hydric soil standard for depleted matrix.

HYDROLOGY

Wetland Hydrology Indicators:Primary Indicators (any one indicator is sufficient)

- | | |
|--|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Biotic Crust (B12) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) (Nonriverine) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input checked="" type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | |

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (**Riverine**)
- ☐ Sediment Deposits (B2) (**Riverine**)
- ☐ Drift Deposits (B3) (**Riverine**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Thin Muck Surface (C7)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:Surface Water Present? Yes ☐ No ☒ Depth (inches): _____Water Table Present? Yes ☐ No ☒ Depth (inches): _____Saturation Present? Yes ☐ No ☒ Depth (inches): _____
(includes capillary fringe)**Wetland Hydrology Present?** Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Soil cracking observed throughout this area.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Encinitas Senior Housing City/County: Encinitas, CA Sampling Date: August 6, 2019
 Applicant/Owner: Greystar State: CA Sampling Point: 6
 Investigator(s): Andrew Smisek Section, Township, Range: Encinitas quadrangle, 1975, T13S, R04W
 Landform (hillslope, terrace, etc.): lowland Local relief (concave, convex, none): concave Slope (%): 1-3
 Subregion (LRR): C - Mediterranean California Lat: 33.01269539950 Long: -117.26073143200 Datum: WGS84
 Soil Map Unit Name: Corralitos loamy sand, 5 to 9 percent slopes NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Is the Sampled Area within a Wetland?	Yes <input checked="" type="radio"/> No <input type="radio"/>
Hydric Soil Present?	Yes <input checked="" type="radio"/>	No <input type="radio"/>		
Wetland Hydrology Present?	Yes <input checked="" type="radio"/>	No <input type="radio"/>		
Remarks: This sample point occurs in an area mapped as coastal scrub which occurs in the lower elevations downslope from the road and the culvert alluvium.				

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:			
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)			
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>3</u> (B)			
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.7</u> % (A/B)			
4. _____	_____	_____	_____	Total Cover: <u>_____</u> %			
Sapling/Shrub Stratum				Prevalence Index worksheet:			
1. <i>Isocoma menziesii</i>	30	Yes	FAC	Total % Cover of: _____ Multiply by: _____			
2. <i>Baccharis salicifolia</i>	5	No	FAC	OBL species	<u>_____</u>	x 1 =	<u>0</u>
3. _____	_____	_____	_____	FACW species	<u>15</u>	x 2 =	<u>30</u>
4. _____	_____	_____	_____	FAC species	<u>35</u>	x 3 =	<u>105</u>
5. _____	_____	_____	_____	FACU species	<u>5</u>	x 4 =	<u>20</u>
Total Cover: <u>35</u> %				UPL species	<u>_____</u>	x 5 =	<u>0</u>
Herb Stratum				Column Totals:	<u>55</u>	(A)	<u>155</u> (B)
1. <i>Frankenia salina</i>	15	Yes	FACW	Prevalence Index = B/A = <u>2.82</u>			
2. <i>Ambrosia psilostachya</i>	5	Yes	FACU	Hydrophytic Vegetation Indicators:			
3. _____	_____	_____	_____	<input checked="" type="checkbox"/> Dominance Test is >50%			
4. _____	_____	_____	_____	<input checked="" type="checkbox"/> Prevalence Index is ≤3.0 ¹			
5. _____	_____	_____	_____	<input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)			
6. _____	_____	_____	_____	<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)			
7. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present.			
8. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/>			
Total Cover: <u>20</u> %							
Woody Vine Stratum							
1. _____	_____	_____	_____				
2. _____	_____	_____	_____				
Total Cover: <u>_____</u> %							
% Bare Ground in Herb Stratum _____ % % Cover of Biotic Crust _____ %							

Remarks: Vegetation mapped as coastal scrub and meets hydrophytic standard.

SOIL

Sampling Point: 6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture ³	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-5	10YR 3/2	100					sandy loam	
5-18	10YR 5/2	90	10YR 4/6	10	C	M	loamy sand	redox features throughout

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix. ²Location: PL=Pore Lining, RC=Root Channel, M=Matrix.³Soil Textures: Clay, Silty Clay, Sandy Clay, Loam, Sandy Clay Loam, Sandy Loam, Clay Loam, Silty Clay Loam, Silt Loam, Silt, Loamy Sand, Sand.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- | | |
|--|--|
| <input type="checkbox"/> Histosol (A1) | <input checked="" type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) (LRR C) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR D) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Vernal Pools (F9) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | |

Indicators for Problematic Hydric Soils:⁴

- ☐ 1 cm Muck (A9) (**LRR C**)
- ☐ 2 cm Muck (A10) (**LRR B**)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

⁴Indicators of hydrophytic vegetation and wetland hydrology must be present.**Restrictive Layer (if present):**

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks: Soils meet sandy redox hydric soil indicator criteria.

HYDROLOGY

Wetland Hydrology Indicators:Primary Indicators (any one indicator is sufficient)

- | | |
|--|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Biotic Crust (B12) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) (Nonriverine) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input checked="" type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | |

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (**Riverine**)
- ☐ Sediment Deposits (B2) (**Riverine**)
- ☐ Drift Deposits (B3) (**Riverine**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Thin Muck Surface (C7)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:Surface Water Present? Yes ☐ No ☒ Depth (inches): _____Water Table Present? Yes ☐ No ☒ Depth (inches): _____Saturation Present? Yes ☐ No ☒ Depth (inches): _____
(includes capillary fringe)**Wetland Hydrology Present?** Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Soil cracking observed throughout this low area.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Encinitas Senior Housing City/County: Encinitas, CA Sampling Date: August 6, 2019
 Applicant/Owner: Greystar State: CA Sampling Point: 7
 Investigator(s): Andrew Smisek Section, Township, Range: Encinitas quadrangle, 1975, T13S, R04W
 Landform (hillslope, terrace, etc.): small alluvium Local relief (concave, convex, none): concave Slope (%): 3-5
 Subregion (LRR): C - Mediterranean California Lat: _____ Long: _____ Datum: WGS84
 Soil Map Unit Name: Corralitos loamy sand, 5 to 9 percent slopes NWI classification: Estuarine&Marinewetland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Is the Sampled Area within a Wetland?	Yes <input type="radio"/>	No <input checked="" type="radio"/>
Hydric Soil Present?	Yes <input type="radio"/>	No <input checked="" type="radio"/>			
Wetland Hydrology Present?	Yes <input type="radio"/>	No <input checked="" type="radio"/>			
Remarks: This sample point occurs in an area mapped as mule fat scrub on a small alluvium at the outfall of an existing culvert.					

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. <i>Salix lasiolepis</i>	40	Yes	FACW	Number of Dominant Species That Are OBL, FACW, or FAC:	2 (A)
2.				Total Number of Dominant Species Across All Strata:	3 (B)
3.				Percent of Dominant Species That Are OBL, FACW, or FAC:	66.7 % (A/B)
4.					
Total Cover:			40 %		
Sapling/Shrub Stratum				Prevalence Index worksheet:	
1. <i>Baccharis salicifolia</i>	40	Yes	FAC	Total % Cover of:	Multiply by:
2.				OBL species	x 1 = 0
3.				FACW species	40 x 2 = 80
4.				FAC species	40 x 3 = 120
5.				FACU species	1 x 4 = 4
Total Cover:			40 %	UPL species	6 x 5 = 30
				Column Totals:	87 (A) 234 (B)
Herb Stratum				Prevalence Index = B/A = 2.69	
1. <i>Carpobrotus edulis</i>	5	Yes	NI	Hydrophytic Vegetation Indicators:	
2. <i>Ambrosia psilostachya</i>	1	No	FACU	<input checked="" type="checkbox"/> Dominance Test is >50%	
3. <i>Foeniculum vulgare</i>	1	No	NI	<input checked="" type="checkbox"/> Prevalence Index is ≤3.0 ¹	
4.				<input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
5.				<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)	
6.				¹ Indicators of hydric soil and wetland hydrology must be present.	
7.				Hydrophytic Vegetation Present?	
8.				Yes <input checked="" type="radio"/> No <input type="radio"/>	
Total Cover:			7 %		
Woody Vine Stratum					
1.					
2.					
Total Cover:			%		
% Bare Ground in Herb Stratum %			% Cover of Biotic Crust %		

Remarks: Vegetation mapped as mule fat scrub and meets hydrophytic vegetation standard.

SOIL

Sampling Point: 7**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features			Loc ²	Texture ³	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0-18	10YR 3/2	100					loamy sand	no redox features

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix. ²Location: PL=Pore Lining, RC=Root Channel, M=Matrix.³Soil Textures: Clay, Silty Clay, Sandy Clay, Loam, Sandy Clay Loam, Sandy Loam, Clay Loam, Silty Clay Loam, Silt Loam, Silt, Loamy Sand, Sand.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) (LRR C) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR D) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Vernal Pools (F9) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | |

Indicators for Problematic Hydric Soils:⁴

- ☐ 1 cm Muck (A9) (**LRR C**)
☐ 2 cm Muck (A10) (**LRR B**)
☐ Reduced Vertic (F18)
☐ Red Parent Material (TF2)
☐ Other (Explain in Remarks)

⁴Indicators of hydrophytic vegetation and wetland hydrology must be present.**Restrictive Layer (if present):**

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks: No hydric soil indicators observed.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- | | |
|--|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Biotic Crust (B12) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) (Nonriverine) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | |

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (**Riverine**)
☐ Sediment Deposits (B2) (**Riverine**)
☐ Drift Deposits (B3) (**Riverine**)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Thin Muck Surface (C7)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)

Field Observations:Surface Water Present? Yes ☐ No ☒ Depth (inches): _____Water Table Present? Yes ☐ No ☒ Depth (inches): _____Saturation Present? Yes ☐ No ☒ Depth (inches): _____
(includes capillary fringe)**Wetland Hydrology Present?** Yes ☐ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: No hydrology indicators observed.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Encinitas Senior Housing City/County: Encinitas, CA Sampling Date: August 6, 2019
 Applicant/Owner: Greystar State: CA Sampling Point: 8
 Investigator(s): Andrew Smisek Section, Township, Range: Encinitas quadrangle, 1975, T13S, R04W
 Landform (hillslope, terrace, etc.): small alluvium Local relief (concave, convex, none): none Slope (%): 5-10
 Subregion (LRR): C - Mediterranean California Lat: 33.01250636010 Long: -117.26086886500 Datum: WGS84
 Soil Map Unit Name: Corralitos loamy sand, 5 to 9 percent slopes NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Is the Sampled Area within a Wetland?	Yes <input type="radio"/>	No <input checked="" type="radio"/>
Hydric Soil Present?	Yes <input checked="" type="radio"/>	No <input type="radio"/>			
Wetland Hydrology Present?	Yes <input checked="" type="radio"/>	No <input type="radio"/>			
Remarks: This sample point occurs in an area mapped as disturbed habitat occurring on a small alluvium adjacent to the existing culvert outfall.					

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:			
1.				Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)			
2.				Total Number of Dominant Species Across All Strata: <u>3</u> (B)			
3.				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33.3</u> % (A/B)			
4.							
Total Cover: <u>2</u> %							
<u>Sapling/Shrub Stratum</u>				Prevalence Index worksheet:			
1. <i>Isocoma menziesii</i>	2	Yes	FAC	Total % Cover of:		Multiply by:	
2.				OBL species	<u>0</u>	x 1 =	<u>0</u>
3.				FACW species	<u>3</u>	x 2 =	<u>6</u>
4.				FAC species	<u>2</u>	x 3 =	<u>6</u>
5.				FACU species	<u>30</u>	x 4 =	<u>120</u>
Total Cover: <u>2</u> %				UPL species	<u>55</u>	x 5 =	<u>275</u>
				Column Totals:	<u>90</u>	(A)	<u>407</u> (B)
				Prevalence Index = B/A = <u>4.52</u>			
<u>Herb Stratum</u>				Hydrophytic Vegetation Indicators:			
1. <i>Carpobrotus edulis</i>	50	Yes	NI	<input checked="" type="checkbox"/> Dominance Test is >50%			
2. <i>Ambrosia psilostachya</i>	30	Yes	FACU	<input checked="" type="checkbox"/> Prevalence Index is ≤3.0 ¹			
3. <i>Raphinus sativus</i>	5	No	NI	<input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)			
4. <i>Frankenia salina</i>	3	No	FACW	<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)			
5.							
6.							
7.							
8.							
Total Cover: <u>88</u> %							
<u>Woody Vine Stratum</u>				¹ Indicators of hydric soil and wetland hydrology must be present.			
1.				Hydrophytic Vegetation Present?			
2.				Yes <input type="radio"/> No <input checked="" type="radio"/>			
Total Cover: <u>0</u> %							
% Bare Ground in Herb Stratum <u>0</u> %		% Cover of Biotic Crust <u>0</u> %					

Remarks: Vegetation did not meet hydrophytic criteria.

SOIL

Sampling Point: 8

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture ³	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-18	10YR 3/2	100					loamy sand	no redox features

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix. ²Location: PL=Pore Lining, RC=Root Channel, M=Matrix.³Soil Textures: Clay, Silty Clay, Sandy Clay, Loam, Sandy Clay Loam, Sandy Loam, Clay Loam, Silty Clay Loam, Silt Loam, Silt, Loamy Sand, Sand.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) (LRR C) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR D) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Vernal Pools (F9) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | |

Indicators for Problematic Hydric Soils:⁴

- ☐ 1 cm Muck (A9) (**LRR C**)
- ☐ 2 cm Muck (A10) (**LRR B**)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

⁴Indicators of hydrophytic vegetation and wetland hydrology must be present.**Restrictive Layer (if present):**

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks: No hydric soils indicators observed.

HYDROLOGY

Wetland Hydrology Indicators:**Primary Indicators (any one indicator is sufficient)**

- | | |
|--|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Biotic Crust (B12) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) (Nonriverine) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | |

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (**Riverine**)
- ☐ Sediment Deposits (B2) (**Riverine**)
- ☐ Drift Deposits (B3) (**Riverine**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Thin Muck Surface (C7)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:Surface Water Present? Yes ☐ No ☒

Depth (inches): _____

Water Table Present? Yes ☐ No ☒

Depth (inches): _____

Saturation Present? Yes ☐ No ☒
(includes capillary fringe)

Depth (inches): _____

Wetland Hydrology Present? Yes ☐ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: No hydrology indicators observed.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Encinitas Senior Housing City/County: Encinitas, CA Sampling Date: August 6, 2019
 Applicant/Owner: Greystar State: CA Sampling Point: 9
 Investigator(s): Andrew Smisek Section, Township, Range: Encinitas quadrangle, 1975, T13S, R04W
 Landform (hillslope, terrace, etc.): lowland Local relief (concave, convex, none): none Slope (%): 1-3
 Subregion (LRR): C - Mediterranean California Lat: 33.01253776980 Long: -117.26081003700 Datum: WGS84
 Soil Map Unit Name: Corralitos loamy sand, 5 to 9 percent slopes NWI classification: Estuarine&Marinewetland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Is the Sampled Area within a Wetland?	Yes <input checked="" type="radio"/>	No <input type="radio"/>
Hydric Soil Present?	Yes <input checked="" type="radio"/>	No <input type="radio"/>			
Wetland Hydrology Present?	Yes <input checked="" type="radio"/>	No <input type="radio"/>			
Remarks: This sample point occurs within an area mapped as coastal scrub at lower elevation adjacent to salt marsh habitat.					

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:			
1.				Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)			
2.				Total Number of Dominant Species Across All Strata: <u>3</u> (B)			
3.				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.7 %</u> (A/B)			
4.							
Total Cover: <u> </u> %							
<u>Sapling/Shrub Stratum</u>				Prevalence Index worksheet:			
1. <i>Isocoma menziesii</i>	<u>60</u>	<u>Yes</u>	<u>FAC</u>	Total % Cover of:		Multiply by:	
2.				OBL species	<u> </u>	x 1 =	<u>0</u>
3.				FACW species	<u>25</u>	x 2 =	<u>50</u>
4.				FAC species	<u>62</u>	x 3 =	<u>186</u>
5.				FACU species	<u>16</u>	x 4 =	<u>64</u>
Total Cover: <u>60 %</u>				UPL species	<u> </u>	x 5 =	<u>0</u>
				Column Totals:	<u>103</u>	(A)	<u>300</u> (B)
				Prevalence Index = B/A = <u>2.91</u>			
<u>Herb Stratum</u>				Hydrophytic Vegetation Indicators:			
1. <i>Frankenia salina</i>	<u>25</u>	<u>Yes</u>	<u>FACW</u>	<input checked="" type="checkbox"/> Dominance Test is >50%			
2. <i>Ambrosia psilostachya</i>	<u>15</u>	<u>Yes</u>	<u>FACU</u>	<input checked="" type="checkbox"/> Prevalence Index is ≤3.0 ¹			
3. <i>Rumex crispus</i>	<u>2</u>	<u>No</u>	<u>FAC</u>	<input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)			
4. <i>Erigeron canadensis</i>	<u>1</u>	<u>No</u>	<u>FACU</u>	<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)			
5.							
6.							
7.							
8.							
Total Cover: <u>43 %</u>							
<u>Woody Vine Stratum</u>				¹ Indicators of hydric soil and wetland hydrology must be present.			
1.				Hydrophytic Vegetation Present?			
2.				Yes <input checked="" type="radio"/> No <input type="radio"/>			
Total Cover: <u> </u> %							
% Bare Ground in Herb Stratum <u> </u> %		% Cover of Biotic Crust <u> </u> %					

Remarks: Vegetation meets hydrophytic standard and mapped as coastal scrub.

SOIL

Sampling Point: 9

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture ³	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 3/2	100					sandy loam	
4-18	10YR 5/2	90	10YR 4/6	10	C	M	loamy sand	redox features throughout

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix. ²Location: PL=Pore Lining, RC=Root Channel, M=Matrix.³Soil Textures: Clay, Silty Clay, Sandy Clay, Loam, Sandy Clay Loam, Sandy Loam, Clay Loam, Silty Clay Loam, Silt Loam, Silt, Loamy Sand, Sand.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- | | |
|--|--|
| <input type="checkbox"/> Histosol (A1) | <input checked="" type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) (LRR C) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR D) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Vernal Pools (F9) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | |

Indicators for Problematic Hydric Soils:⁴

- ☐ 1 cm Muck (A9) (**LRR C**)
☐ 2 cm Muck (A10) (**LRR B**)
☐ Reduced Vertic (F18)
☐ Red Parent Material (TF2)
☐ Other (Explain in Remarks)

⁴Indicators of hydrophytic vegetation and wetland hydrology must be present.**Restrictive Layer (if present):**

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks: Soils meet hydric soil indicator criteria for sandy redox.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- | | |
|--|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Biotic Crust (B12) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) (Nonriverine) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input checked="" type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | |

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (**Riverine**)
☐ Sediment Deposits (B2) (**Riverine**)
☐ Drift Deposits (B3) (**Riverine**)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Thin Muck Surface (C7)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)

Field Observations:Surface Water Present? Yes ☐ No ☒ Depth (inches): _____Water Table Present? Yes ☐ No ☒ Depth (inches): _____Saturation Present? Yes ☐ No ☒ Depth (inches): _____
(includes capillary fringe)**Wetland Hydrology Present?** Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Soil cracking observed throughout this low area.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Encinitas Senior Housing City/County: Encinitas, CA Sampling Date: August 6, 2019
 Applicant/Owner: Greystar State: CA Sampling Point: 10
 Investigator(s): Andrew Smisek Section, Township, Range: Encinitas quadrangle, 1975, T13S, R04W
 Landform (hillslope, terrace, etc.): lowland Local relief (concave, convex, none): none Slope (%): 1-3
 Subregion (LRR): C - Mediterranean California Lat: 33.01238173310 Long: -117.26099558900 Datum: WGS84
 Soil Map Unit Name: Corralitos loamy sand, 5 to 9 percent slopes NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Is the Sampled Area within a Wetland?	Yes <input checked="" type="radio"/> No <input type="radio"/>
Hydric Soil Present?	Yes <input checked="" type="radio"/>	No <input type="radio"/>		
Wetland Hydrology Present?	Yes <input checked="" type="radio"/>	No <input type="radio"/>		
Remarks: This sample point occurs in an area mapped as south coastal salt marsh within the low and flat areas southeast of the slopes along the road.				

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:			
1. _____				Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)			
2. _____				Total Number of Dominant Species Across All Strata: <u>2</u> (B)			
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0 %</u> (A/B)			
4. _____							
Total Cover: <u>10 %</u>							
<u>Sapling/Shrub Stratum</u>				Prevalence Index worksheet:			
1. <i>Isocoma menziesii</i>	10	Yes	FAC	Total % Cover of:		Multiply by:	
2. _____				OBL species	<u>0</u>	x 1 =	<u>0</u>
3. _____				FACW species	<u>61</u>	x 2 =	<u>122</u>
4. _____				FAC species	<u>11</u>	x 3 =	<u>33</u>
5. _____				FACU species	<u>0</u>	x 4 =	<u>0</u>
Total Cover: <u>10 %</u>				UPL species	<u>5</u>	x 5 =	<u>25</u>
				Column Totals:	<u>77</u>	(A)	<u>180</u> (B)
				Prevalence Index = B/A = <u>2.34</u>			
<u>Herb Stratum</u>				Hydrophytic Vegetation Indicators:			
1. <i>Frankenia salina</i>	60	Yes	FACW	<input checked="" type="checkbox"/> Dominance Test is >50%			
2. <i>Cuscuta salina</i>	5	No	Not Listed	<input checked="" type="checkbox"/> Prevalence Index is ≤3.0 ¹			
3. <i>Arthrocnemum subterminale</i>	1	No	FACW	<input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)			
4. <i>Distichlis spicata</i>	1	No	FAC	<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)			
5. _____							
6. _____							
7. _____							
8. _____							
Total Cover: <u>67 %</u>							
<u>Woody Vine Stratum</u>				¹ Indicators of hydric soil and wetland hydrology must be present.			
1. _____				Hydrophytic Vegetation Present?			
2. _____				Yes <input checked="" type="radio"/> No <input type="radio"/>			
Total Cover: <u>67 %</u>							
% Bare Ground in Herb Stratum _____ %							
% Cover of Biotic Crust _____ %							

Remarks: Vegetation mapped as south coastal salt marsh and meets hydrophytic vegetation standard.

SOIL

Sampling Point: 10

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture ³	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-3	10YR 3/2	100					sandy loam	some organics mixed in
3-18	10YR 5/2	90	10YR 4/6	10	C	RC	loamy sand	redox features throughout

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix. ²Location: PL=Pore Lining, RC=Root Channel, M=Matrix.³Soil Textures: Clay, Silty Clay, Sandy Clay, Loam, Sandy Clay Loam, Sandy Loam, Clay Loam, Silty Clay Loam, Silt Loam, Silt, Loamy Sand, Sand.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- | | |
|--|--|
| <input type="checkbox"/> Histosol (A1) | <input checked="" type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) (LRR C) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR D) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Vernal Pools (F9) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | |

Indicators for Problematic Hydric Soils:⁴

- ☐ 1 cm Muck (A9) (LRR C)
- ☐ 2 cm Muck (A10) (LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

⁴Indicators of hydrophytic vegetation and wetland hydrology must be present.**Restrictive Layer (if present):**

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks: Soils meet sandy redox hydric soil indicator criteria.

HYDROLOGY

Wetland Hydrology Indicators:**Primary Indicators (any one indicator is sufficient)**

- | | |
|--|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Biotic Crust (B12) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) (Nonriverine) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input checked="" type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | |

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (Riverine)
- ☐ Sediment Deposits (B2) (Riverine)
- ☐ Drift Deposits (B3) (Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Thin Muck Surface (C7)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:Surface Water Present? Yes ☐ No ☐ Depth (inches): _____Water Table Present? Yes ☐ No ☐ Depth (inches): _____Saturation Present? Yes ☐ No ☐ Depth (inches): _____
(includes capillary fringe)Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Soil cracking occurs throughout this low area.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Encinitas Senior Housing City/County: Encinitas, CA Sampling Date: August 6, 2019
 Applicant/Owner: Greystar State: CA Sampling Point: 11
 Investigator(s): Andrew Smisek Section, Township, Range: Encinitas quadrangle, 1975, T13S, R04W
 Landform (hillslope, terrace, etc.): lowland Local relief (concave, convex, none): none Slope (%): 0
 Subregion (LRR): C - Mediterranean California Lat: 33.01203568390 Long: -117.26137713800 Datum: WGS84
 Soil Map Unit Name: Lagoon Areas of San Diego NWI classification: Estuarine&Marinewetland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Is the Sampled Area within a Wetland?	Yes <input checked="" type="radio"/>	No <input type="radio"/>
Hydric Soil Present?	Yes <input checked="" type="radio"/>	No <input type="radio"/>			
Wetland Hydrology Present?	Yes <input checked="" type="radio"/>	No <input type="radio"/>			
Remarks: This sample point occurs in an area mapped as south coastal salt marsh within the low and flat areas of the lagoon, southeast of the slopes along the road.					

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:			
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)			
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>1</u> (B)			
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0 %</u> (A/B)			
4. _____	_____	_____	_____	Total Cover: <u>_____</u> %			
Sapling/Shrub Stratum				Prevalence Index worksheet:			
1. _____	_____	_____	_____	Total % Cover of: _____ Multiply by: _____			
2. _____	_____	_____	_____	OBL species	<u>80</u>	x 1 =	<u>80</u>
3. _____	_____	_____	_____	FACW species	<u>6</u>	x 2 =	<u>12</u>
4. _____	_____	_____	_____	FAC species	<u>5</u>	x 3 =	<u>15</u>
5. _____	_____	_____	_____	FACU species	<u>5</u>	x 4 =	<u>20</u>
Total Cover: <u>_____</u> %				UPL species	_____	x 5 =	<u>0</u>
Herb Stratum				Column Totals:	<u>96</u>	(A)	<u>127</u> (B)
1. <i>Jaumea carnosa</i>	<u>80</u>	Yes	OBL	Prevalence Index = B/A = <u>1.32</u>			
2. <i>Distichlis spicata</i>	<u>5</u>	No	FAC	Hydrophytic Vegetation Indicators:			
3. <i>Frankenia salina</i>	<u>5</u>	No	FACW	<input checked="" type="checkbox"/> Dominance Test is >50%			
4. <i>Ambrosia psilostachya</i>	<u>5</u>	No	FACU	<input checked="" type="checkbox"/> Prevalence Index is ≤3.0 ¹			
5. <i>Arthrocnemum subterminale</i>	<u>1</u>	No	FACW	<input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)			
6. _____	_____	_____	_____	<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)			
7. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present.			
8. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/>			
Total Cover: <u>96 %</u>							
Woody Vine Stratum							
1. _____	_____	_____	_____				
2. _____	_____	_____	_____				
Total Cover: <u>_____</u> %							
% Bare Ground in Herb Stratum <u>_____</u> % % Cover of Biotic Crust <u>_____</u> %							

Remarks: Vegetation mapped as south coastal salt marsh and meets hydrophytic vegetation standard.

SOIL

Sampling Point: 11

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features			Loc ²	Texture ³	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0-4	10YR 3/2	100					sandy loam	
4-18	10YR 5/2	85	10YR 4/6	15	C	M	loamy sand	redox features throughout

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix. ²Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

³Soil Textures: Clay, Silty Clay, Sandy Clay, Loam, Sandy Clay Loam, Sandy Loam, Clay Loam, Silty Clay Loam, Silt Loam, Silt, Loamy Sand, Sand.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- | | |
|--|--|
| <input type="checkbox"/> Histosol (A1) | <input checked="" type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) (LRR C) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR D) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Vernal Pools (F9) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | |

Indicators for Problematic Hydric Soils:⁴

- ☐ 1 cm Muck (A9) (**LRR C**)
- ☐ 2 cm Muck (A10) (**LRR B**)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

⁴Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks: Soils meet hydric soil indicator criteria for sandy redox.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- | | |
|--|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Biotic Crust (B12) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) (Nonriverine) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input checked="" type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | |

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (**Riverine**)
- ☐ Sediment Deposits (B2) (**Riverine**)
- ☐ Drift Deposits (B3) (**Riverine**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Thin Muck Surface (C7)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): _____

Water Table Present? Yes ☐ No ☒ Depth (inches): _____

Saturation Present? Yes ☐ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Soil cracks observed throughout this low area.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Encinitas Senior Housing City/County: Encinitas, CA Sampling Date: August 6, 2019
 Applicant/Owner: Greystar State: CA Sampling Point: 12
 Investigator(s): Andrew Smisek Section, Township, Range: Encinitas quadrangle, 1975, T13S, R04W
 Landform (hillslope, terrace, etc.): small slope Local relief (concave, convex, none): none Slope (%): 10-15
 Subregion (LRR): C - Mediterranean California Lat: 33.01208122540 Long: -117.26139942800 Datum: WGS84
 Soil Map Unit Name: Corralitos loamy sand, 5 to 9 percent slopes NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Is the Sampled Area within a Wetland?	Yes <input type="radio"/>	No <input checked="" type="radio"/>
Hydric Soil Present?	Yes <input type="radio"/>	No <input checked="" type="radio"/>			
Wetland Hydrology Present?	Yes <input type="radio"/>	No <input checked="" type="radio"/>			
Remarks: This sample point occurs in an area mapped as coastal scrub along a small slope extending down from the adjacent road to the salt marsh areas below.					

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:			
1. _____				Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)			
2. _____				Total Number of Dominant Species Across All Strata: <u>2</u> (B)			
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0 %</u> (A/B)			
4. _____							
Total Cover: <u>15 %</u>							
Sapling/Shrub Stratum				Prevalence Index worksheet:			
1. <i>Isocoma menziesii</i>	15	Yes	FAC	Total % Cover of: _____ Multiply by: _____			
2. _____				OBL species	<u>2</u>	x 1 =	<u>2</u>
3. _____				FACW species	<u>60</u>	x 2 =	<u>120</u>
4. _____				FAC species	<u>15</u>	x 3 =	<u>45</u>
5. _____				FACU species	<u>13</u>	x 4 =	<u>52</u>
Total Cover: <u>15 %</u>				UPL species	<u>1</u>	x 5 =	<u>5</u>
Herb Stratum				Column Totals:	<u>89</u>	(A)	<u>222</u> (B)
1. <i>Frankenia salina</i>	60	Yes	FACW	Prevalence Index = B/A = <u>2.49</u>			
2. <i>Melilotus indicus</i>	5	No	FACU	Hydrophytic Vegetation Indicators:			
3. <i>Ambrosia psilostachya</i>	5	No	FACU	<input checked="" type="checkbox"/> Dominance Test is >50%			
4. <i>Erigeron canadensis</i>	3	No	FACU	<input checked="" type="checkbox"/> Prevalence Index is ≤3.0 ¹			
5. <i>Heterotheca grandiflora</i>	1	No	NI	<input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)			
6. _____				<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)			
7. _____				¹ Indicators of hydric soil and wetland hydrology must be present.			
8. _____							
Total Cover: <u>74 %</u>				Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/>			
Woody Vine Stratum							
1. _____							
2. _____							
Total Cover: _____ %							
% Bare Ground in Herb Stratum _____ %							
% Cover of Biotic Crust _____ %							

Remarks: Vegetation mapped as coastal scrub and meets hydrophytic vegetation standard.

SOIL

Sampling Point: 12**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture ³	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-2	10YR 3/2	100					sandy loam	some organics mixed in
2-10	10YR 3/2	100					loamy sand	no redox features
10-18	10YR 5/2	95	10YR 4/6	5	C	M	loamy sand	redox features

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix. ²Location: PL=Pore Lining, RC=Root Channel, M=Matrix.³Soil Textures: Clay, Silty Clay, Sandy Clay, Loam, Sandy Clay Loam, Sandy Loam, Clay Loam, Silty Clay Loam, Silt Loam, Silt, Loamy Sand, Sand.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) (LRR C) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR D) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Vernal Pools (F9) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | |

Indicators for Problematic Hydric Soils⁴:

- ☐ 1 cm Muck (A9) (**LRR C**)
- ☐ 2 cm Muck (A10) (**LRR B**)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

⁴Indicators of hydrophytic vegetation and wetland hydrology must be present.**Restrictive Layer (if present):**

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks: Although some redox features were observed in the 10-18 inches layer, this layer occurs too deep to meet any hydric soil criteria.

HYDROLOGY

Wetland Hydrology Indicators:**Primary Indicators (any one indicator is sufficient)**

- | | |
|--|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Biotic Crust (B12) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) (Nonriverine) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | |

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (**Riverine**)
- ☐ Sediment Deposits (B2) (**Riverine**)
- ☐ Drift Deposits (B3) (**Riverine**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Thin Muck Surface (C7)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:Surface Water Present? Yes ☐ No ☒ Depth (inches): _____Water Table Present? Yes ☐ No ☒ Depth (inches): _____Saturation Present? Yes ☐ No ☒ Depth (inches): _____
(includes capillary fringe)**Wetland Hydrology Present?** Yes ☐ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: No hydrology indicators observed along this small slope, saturation unlikely here except deep below soil surface.

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: Encinitas Senior Housing City/County: Encinitas, CA Sampling Date: August 6, 2019
 Applicant/Owner: Greystar State: CA Sampling Point: 13
 Investigator(s): Andrew Smisek Section, Township, Range: Encinitas quadrangle, 1975, T13S, R04W
 Landform (hillslope, terrace, etc.): small alluvium Local relief (concave, convex, none): concave Slope (%): 5-10
 Subregion (LRR): C - Mediterranean California Lat: 33.01214600280 Long: -117.26134255600 Datum: WGS84
 Soil Map Unit Name: Corralitos loamy sand, 5 to 9 percent slopes NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Is the Sampled Area within a Wetland?	Yes <input type="radio"/>	No <input checked="" type="radio"/>
Hydric Soil Present?	Yes <input checked="" type="radio"/>	No <input type="radio"/>			
Wetland Hydrology Present?	Yes <input checked="" type="radio"/>	No <input type="radio"/>			
Remarks: This sample point occurs in the small alluvium area occurring adjacent to the outfall of the existing culvert. This area is mapped as mule fat scrub.					

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:			
1.				Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)			
2.				Total Number of Dominant Species Across All Strata: <u>3</u> (B)			
3.				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.7</u> % (A/B)			
4.							
Total Cover: <u>90</u> %							
<u>Sapling/Shrub Stratum</u>				Prevalence Index worksheet:			
1. <i>Baccharis salicifolia</i>	90	Yes	FAC	Total % Cover of:		Multiply by:	
2.				OBL species	<u>2</u>	x 1 =	<u>0</u>
3.				FACW species	<u>3</u>	x 2 =	<u>6</u>
4.				FAC species	<u>90</u>	x 3 =	<u>270</u>
5.				FACU species	<u>5</u>	x 4 =	<u>20</u>
Total Cover: <u>90</u> %				UPL species	<u>0</u>	x 5 =	<u>0</u>
				Column Totals:	<u>98</u> (A)		<u>296</u> (B)
				Prevalence Index = B/A = <u>3.02</u>			
<u>Herb Stratum</u>				Hydrophytic Vegetation Indicators:			
1. <i>Ambrosia psilostachya</i>	5	Yes	FACU	<input checked="" type="checkbox"/> Dominance Test is >50%			
2. <i>Oenothera elata</i>	3	Yes	FACW	<input checked="" type="checkbox"/> Prevalence Index is ≤3.0 ¹			
3.				<input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)			
4.				<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)			
5.							
6.							
7.							
8.							
Total Cover: <u>8</u> %							
<u>Woody Vine Stratum</u>				¹ Indicators of hydric soil and wetland hydrology must be present.			
1.				Hydrophytic Vegetation Present?			
2.				Yes <input checked="" type="radio"/> No <input type="radio"/>			
Total Cover: <u>0</u> %							
% Bare Ground in Herb Stratum <u>0</u> %		% Cover of Biotic Crust <u>0</u> %					

Remarks: Vegetation mapped as mule fat scrub and meets hydrophytic vegetation standard.

SOIL

Sampling Point: 13

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture ³	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-2	10YR 3/2	100					sandy loam	organics mixed in here
2-18	10YR 3/2	100					loamy sand	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix. ²Location: PL=Pore Lining, RC=Root Channel, M=Matrix.³Soil Textures: Clay, Silty Clay, Sandy Clay, Loam, Sandy Clay Loam, Sandy Loam, Clay Loam, Silty Clay Loam, Silt Loam, Silt, Loamy Sand, Sand.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) (LRR C) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR D) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Vernal Pools (F9) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | |

Indicators for Problematic Hydric Soils:⁴

- ☐ 1 cm Muck (A9) (**LRR C**)
- ☐ 2 cm Muck (A10) (**LRR B**)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

⁴Indicators of hydrophytic vegetation and wetland hydrology must be present.**Restrictive Layer (if present):**

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks: No hydric soil indicators observed.

HYDROLOGY

Wetland Hydrology Indicators:**Primary Indicators (any one indicator is sufficient)**

- | | |
|--|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Biotic Crust (B12) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) (Nonriverine) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | |

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (**Riverine**)
- ☐ Sediment Deposits (B2) (**Riverine**)
- ☐ Drift Deposits (B3) (**Riverine**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Thin Muck Surface (C7)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:Surface Water Present? Yes ☐ No ☒ Depth (inches): _____Water Table Present? Yes ☐ No ☒ Depth (inches): _____Saturation Present? Yes ☐ No ☒ Depth (inches): _____
(includes capillary fringe)**Wetland Hydrology Present?** Yes ☐ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: No hydrology indicators observed on this small alluvium.

Table 7-1

COMMON INVASIVE EXOTIC PLANT SPECIES

<i>Acacia</i> spp. Acacia	<i>Cotoneaster pannosa</i> Cotoneaster	<i>Phragmites communis</i> Common reed
<i>Ailanthus altissima</i> Tree-of-heaven	<i>Cynara cardunculus</i> Artichoke thistle	<i>Pyracantha angustifolia</i> Pyracantha
<i>Arundo donax</i> Giant reed	<i>Cynodon dactylon</i> Bermuda grass	<i>Raphanus sativus</i> Wild radish
<i>Atriplex semibaccata</i> Australian saltbush	<i>Dipsacus</i> spp. Teasel	<i>Ricinus communis</i> Castor bean
<i>Bambusa</i> spp. Bamboo	<i>Eucalyptus</i> spp. Gum, eucalyptus	<i>Robinia pseudoacacia</i> Black locust
<i>Brassica</i> spp. Mustard	<i>Foeniculum vulgare</i> Fennel	<i>Salsola australis</i> Russian thistle
<i>Carduus</i> spp. Thistle	<i>Hedera helix</i> English ivy	<i>Schinus molle</i> California pepper
<i>Carpobrotus edulis</i> Iceplant	<i>Lepidium latifolium</i> Perennial pepperweed	<i>Schinus terebinthifolius</i> Brazilian pepper
<i>Centaurea solstitialis</i> Yellow starthistle	<i>Melilotus</i> spp. Sweet clover	<i>Senecio mikanoides</i> German ivy
<i>Chenopodium</i> spp. Goosefoot, lambsquarter	<i>Mesembryanthemum chilensis</i> (Ice plant)	<i>Silybum marianum</i> Milk thistle
<i>Chrysanthemum</i> spp. Chrysanthemum	<i>Muehlenbeckia complexa</i> Mattress vine	<i>Spartium junceum</i> Spanish broom
<i>Cirsium</i> spp. Thistle	<i>Myoporum laetum</i> Myoporum	<i>Tamarix</i> spp. Tamarisk, salt cedar
<i>Conium maculatum</i> Poison hemlock	<i>Nicotiana glauca</i> Tree tobacco	<i>Ulex europaeus</i> Gorse
<i>Conyza canadensis</i> Horseweed	<i>Pennisetum clandestinum</i> Kikuygrass	<i>Vinca major</i> Periwinkle
<i>Cortaderia jubata</i> Andean pampas grass	<i>Pennisetum setaceum</i> Fountain grass	<i>Washingtonia robusta</i> Fan palm
<i>Cortaderia selloana</i> Pampas grass	<i>Phoenix canariensis</i> Canary Island palm	<i>Xanthium strumarium</i> Cocklebur

Also refer to the California Exotic Pest Plant Council's *Exotic Pest Plants of Greatest Ecological Concern in California*. Nonnative grasses in San Diego County are too numerous to list individually.



July 30, 2019

Stacey Love
U.S. Fish and Wildlife Service
2177 Salk Avenue, Ste. 250
Carlsbad, CA 92008

Subject: Results (Negative) Of Focused Protocol Coastal California Gnatcatcher Surveys on Encinitas Senior Living; City of Encinitas, County of San Diego

Ms. Love,

Due to the presence of appropriate habitat, three (3) protocol surveys for the coastal California gnatcatcher (*Poliophtila californica californica*) were completed on the approximately 19.68-acre Property (Figures 1-3). The project includes Assessor's Parcel Numbers (APNs) 261-210-01-00 & 261-210-12-00. The property is situated on the southern edge of the city of Encinitas, east of Interstate 5, north of Manchester Blvd (a small portion of the site is south of Manchester), adjacent to San Elijo Lagoon, which lies along the southern boundary of the project..

Qualified biologist Alicia Hill (permit number TE-06145B) conducted the three protocol surveys. The purpose of the protocol surveys was to determine the presence/absence status of coastal California gnatcatchers (CAGN) on the Property, which is to be utilized as a Habitat Mitigation Preserve. This report describes the methods, results, and conclusions of the completed protocol surveys.

Site Location

The approximately 19.68-acre property is currently utilized as agricultural fields. The project is located on the 7.5-minute USGS Encinitas, California topographic quadrangle, in Section 33, Township 12 South, Range 4 West.

Vegetation Communities

The property is dominated by active agricultural fields and along the northern limit are areas of coastal sage scrub. The majority of the disturbed California sage-scrub with scattered California sage (*Artemisia californica*), *Encelia californica*, California buckwheat (*Eriogonum fasciculatum*) and laural sumac (*Melosma laurina*). The property included highly disturbed patches of habitat dominated by short-pod mustard (*Hirschfeldia incana*) and non-native grasses, as well as three small patches of higher quality sage scrub habitat less disturbed by invasive species, located within the along the northern border of the silt fencing.

Survey Methods

Alicia Hill (ACH; permit number TE-06145B) conducted the three (3) protocol surveys for the coastal California gnatcatcher according to the USFWS gnatcatcher survey protocol.

The survey specifics are described below:

Survey #1 5/17/19:

Start: 11:10, 68F, 2-4 mph, 15%cc

End: 11:40, 68F, 2-4 mph, 15%cc

ACH

Survey #2 5/27/19:

Start: 0945, 61F, 1-3 mph, 30%cc

End: 1050, 62F, 1-3 mph, 10%cc

ACH

Survey #3 6/9/19:

Start: 0835, 64F, 0-1 mph, 100%cc

End: 0910, 64F, 0-1 mph, 100%cc

ACH

As described, all areas supporting coastal sage scrub on site, as well as within appropriate habitat and around the property (offsite) extending approximately 200 feet were carefully searched for the presence or absence of coastal California gnatcatchers.

Survey Results

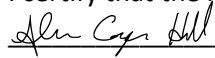
The completed surveys are Negative for the presence of onsite coastal California gnatcatchers (Figure 4).

One CAGN family group was detected offsite to the northwest of the survey area during survey #2 in the northern portion of the survey area within high quality CSS. A single lone male CAGN was detected offsite immediately to the north of the Property in the far eastern area of the survey area during survey #3. This male most likely came from a nearby high-quality CSS area to the northeast of the property and was believed to be different than the male observed during survey #2.

In addition to the observed gnatcatchers, the following species were also observed:

Turkey Vulture, Red-tailed Hawk, Mourning Dove, Anna's Hummingbird, Black Phoebe, Say's Phoebe, California Scrub-Jay, American Crow, Common Raven, Cliff Swallow, Bushtit, House Wren, Bewick's Wren, California Gnatcatcher, Wrentit, California Thrasher, Northern Mockingbird, Spotted Towhee, California Towhee, Song Sparrow, Brown-headed Cowbird, Hooded Oriole, House Finch, Lesser Goldfinch, Western Kingbird, California Quail, European Starling, Snowy Egret, Great-blue Heron, Northern Rough-winged Swallow, Mallard, Allen's Hummingbird.

I certify that the information in this survey report and attached exhibits fully and accurately represents my work.



Alicia Hill

8/1/19

Date

Should you have any questions or concerns regarding this survey, please do not hesitate to contact me.

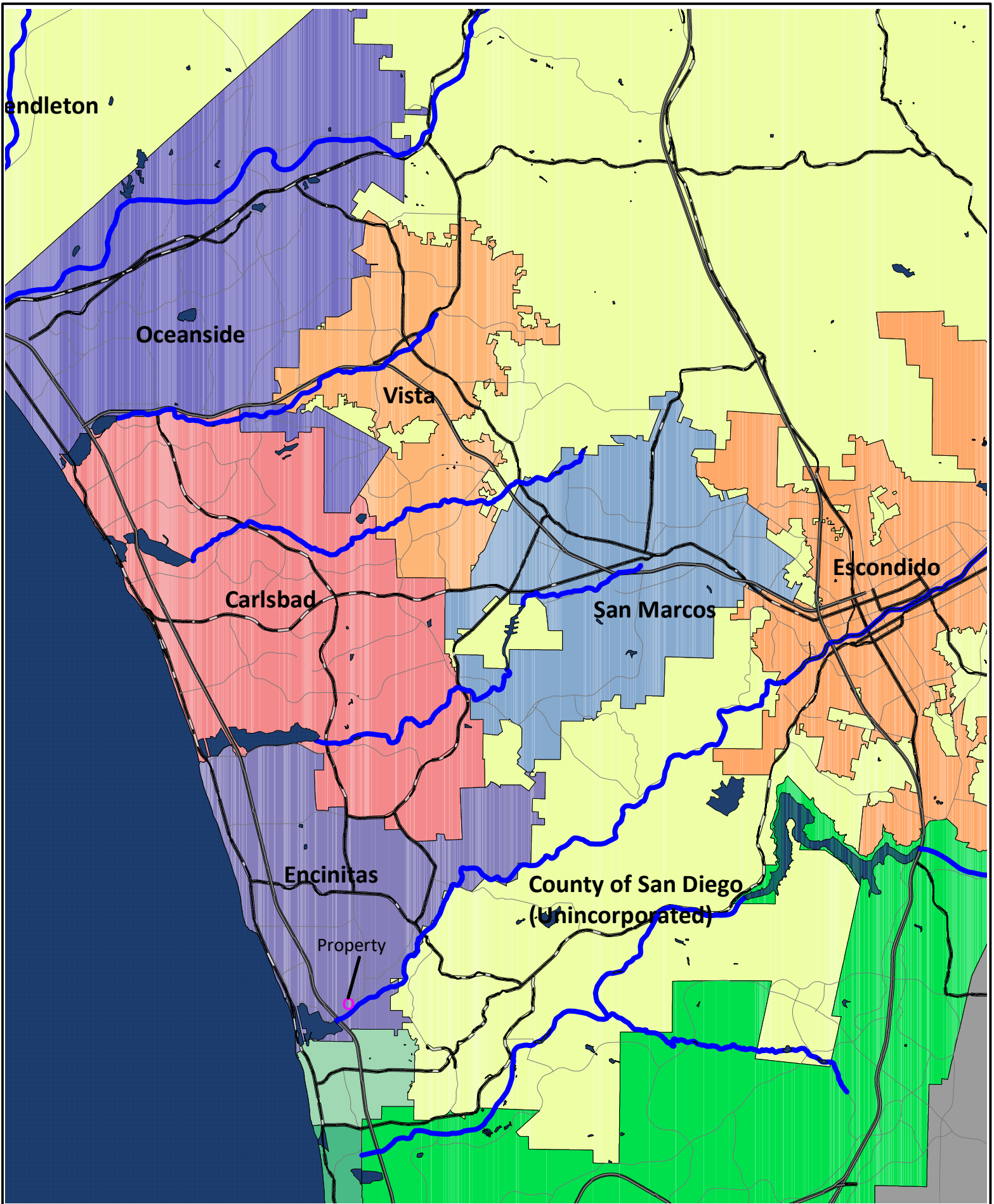
Sincerely,



Michael Jefferson
President
BLUE Consulting Group

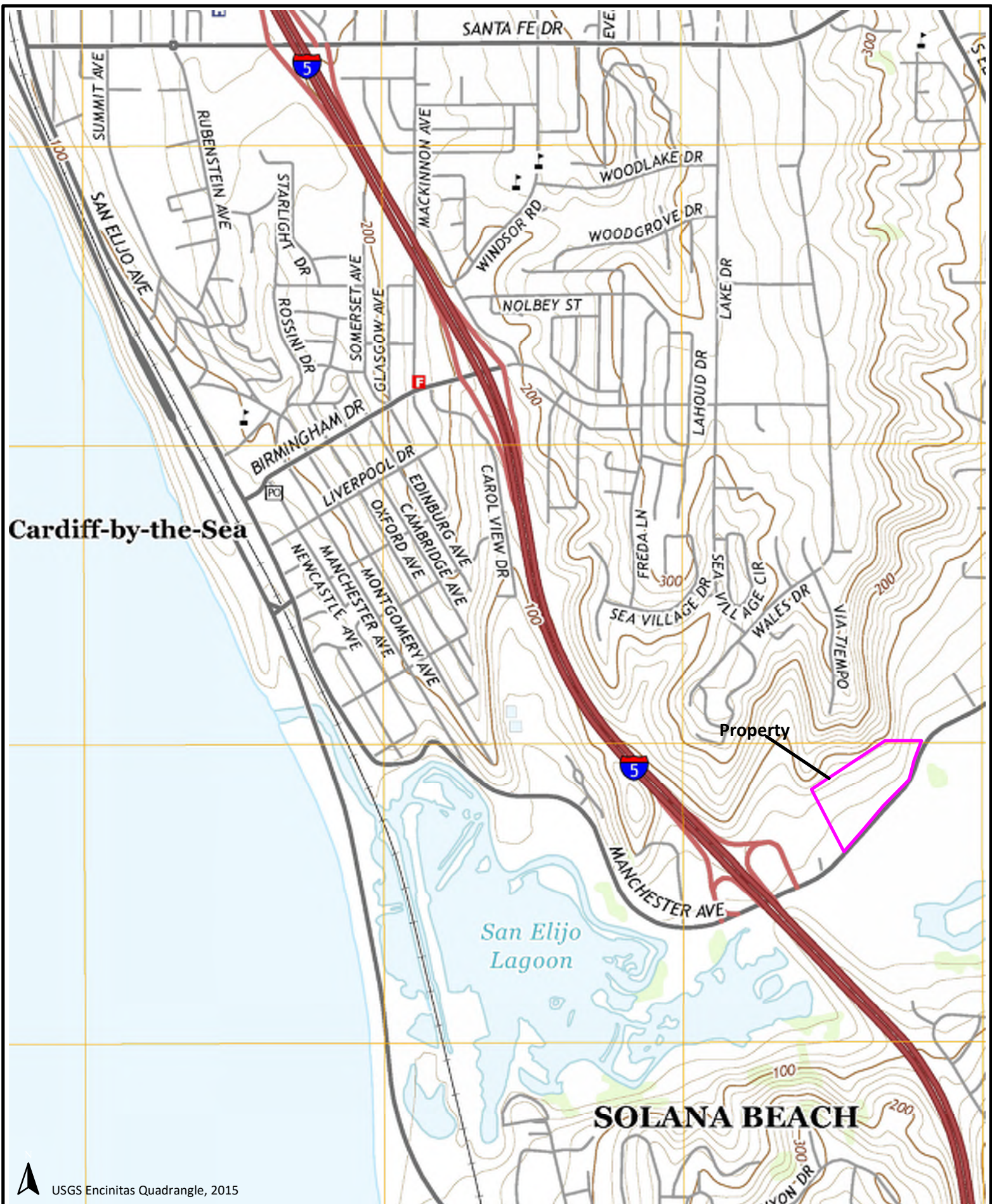
Attached: Figures 1-4
Pictures 1-4
CAGN Protocol Survey Notification

ATTACHMENTS

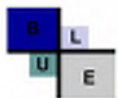


○ Encinitas 45 Property

FIGURE 1
Regional Project
Location

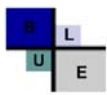


USGS Encinitas Quadrangle, 2015



Property

FIGURE 2
Property Location
USGS Topo Map - Encinitas



 Property

FIGURE 3
Property Aerial

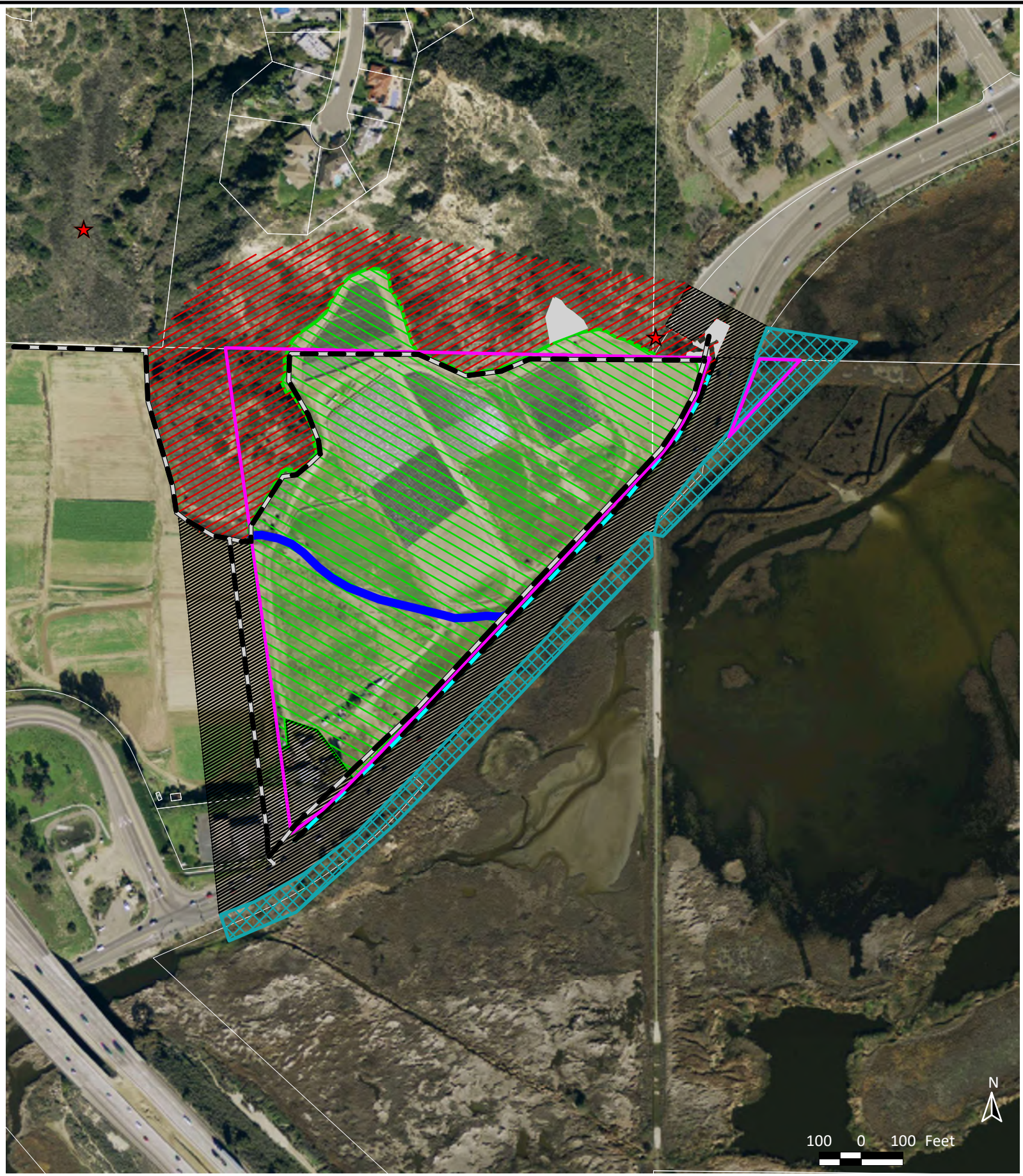


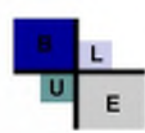
FIGURE 4
CAGN Observed











BLUE Consulting Group
PO BOX 501115
SAN DIEGO, CA 92150
(858) 391-8145

MEMORANDUM

TO: Stacey Love - U.S. FWS Carlsbad, Stacey_love@fws.com, Fax: 760-431-9624
CC: Alicia Cooper Hill (ahill@halcyonenv.com; t: 858.848.0368 | c: 760.533.9667)

FROM: Michael Jefferson, Mike@BLUEconsulting.com

DATE: 4/22/2019

RE: Encinitas Senior Living - Request to commence protocol surveys for the federally-listed coastal California gnatcatcher (CAGN) (*Poliophtila californica californica*).

Comments:

Ms. Love,

This letter is to serve as a request and 15 day notification to commence protocol surveys for the federally-listed coastal California gnatcatcher (CAGN) (*Poliophtila californica californica*).

Three (3) protocol surveys are proposed, each a week apart; approximate survey dates initiating the week of May 6th and continuing for the next 2 consecutive weeks. The surveys are being conducted to determine the presence/absence status of the CAGN onsite for the purpose of making the 'occupied'/'un-occupied' determination for the coastal sage scrub habitat located along the norther limits of the Property.

The approximately 19.68-acre property is currently utilized as agricultural fields. The project is located on the 7.5-minute USGS Encinitas, California topographic quadrangle, in Section 33, Township 12 South, Range 4 West (Figures 1-3).

The project includes Assessor's Parcel Numbers (APNs) 261-210-01-00 & 261-210-12-00. The property is situated on the southern edge of the city of Encinitas, east of Interstate 5, north of Manchester Blvd (a small portion of the site is south of Manchester), adjacent to San Elijo Lagoon, which lies along the southern boundary of the project.

These surveys will be conducted according to USFWS protocol by Travis Cooper (Permit Number - TE-170389-5) and Alicia Hill, permit number TE-06145B. Permitted species include California gnatcatcher.

If you should have any questions regarding our intentions to conduct these surveys, please feel free to contact me at 858-391-8145 or by the email address above.

Sincerely,

A handwritten signature in blue ink, appearing to read 'MJ', with a long horizontal stroke extending to the right.

Michael Jefferson
President
BLUE Consulting Group

Attachments:

- Regional Location Map
- USGS Topo Project Location Map
- Property Aerial